

**Report 11337  
November 1998**

**Integrated Advanced Microwave Sounding Unit-A  
(AMSU-A)**

**Performance Verification Reports**

**Final Comprehensive Performance Test Report**

**P/N: 1356008-1-TST, S/N: 202/A1**

**Contract No. NAS 5-32314  
CDRL 208**

**Submitted to:**

**National Aeronautics and Space Administration  
Goddard Space Flight Center  
Greenbelt, Maryland 20771**

**Submitted by:**

**Aerojet  
1100 West Hollyvale Street  
Azusa, California 91702**

**TEST DATA SHEET NO. 1** (Sheet 1 of 6)  
Grounding Interface Test (Paragraph 3.3.2, Step 2)

J1 of Spacecraft Interface				
From Chassis Ground to	Pin Description	Required Resistance (Ohms)	Measured Value (Ohms)	Pass/Fail
J1-1	+29V QUIET PWR BUS	> 1M	> 1M $\Omega$	Pass
J1-2	+29V QUIET PWR BUS	> 1M		
J1-3	29V QUIET BUS RTN	> 1M		
J1-4	29V QUIET BUS RTN	> 1M		
J1-5	+29V NOISY PWR BUS	> 1M		
J1-6	+29V NOISY PWR BUS	> 1M		
J1-7	29V NOISY BUS RTN	> 1M		
J1-8	29V NOISY BUS RTN	> 1M		
J1-9	SURVIVAL PWR BUS A	> 1M		
J1-10	SURVIVAL BUS A RTN	> 1M		
J1-11	SURVIVAL PWR BUS A	> 1M		
J1-12	SURVIVAL BUS A RTN	> 1M	> 1M $\Omega$	
J1-13	CHASSIS GROUND	< 1	0.12 $\Omega$	
J1-14	+29V QUIET PWR BUS	> 1M	> 1M $\Omega$	
J1-15	+29V QUIET PWR BUS	> 1M		
J1-16	29V QUIET BUS RTN	> 1M		
J1-17	29V QUIET BUS RTN	> 1M		
J1-18	+29V NOISY PWR BUS	> 1M		
J1-19	+29V NOISY PWR BUS	> 1M		
J1-20	29V NOISY BUS RTN	> 1M		
J1-21	29V NOISY BUS RTN	> 1M		
J1-22	SURVIVAL PWR BUS B	> 1M		
J1-23	SURVIVAL BUS B RTN	> 1M		
J1-24	SURVIVAL PWR BUS B	> 1M		
J1-25	SURVIVAL BUS B RTN	> 1M	> 1M $\Omega$	Pass

UPV. 0580

EOS/AMSU-A1 System P/N 1356008

Shop Order: 560863

S/N: 202

Circle Test: 1<sup>st</sup> CPT

Final CPT

Sub CPT N/A

LPT N/A

*R. Khoury*  
Test Systems Engineer



12 Nov 98

Date

7A  
200

NOV 19 1998

*J. Sanford*  
Customer Representative

11-20-98  
Date

Quality Control

Date

TEST DATA SHEET NO. 1 (Sheet 2 of 6)  
Grounding Interface Test (Paragraph 3.3.2, Step 2)

J2 of Spacecraft Interface				
From Chassis Ground to	Pin Description	Required Resistance (Ohms)	Measured Value (Ohms)	Pass/Fail
J2-1	A1-1 MOTOR TEMP HI	> 1M	> 1MΩ	Pass
J2-2	A1-1 MOTOR TEMP LO	> 1M		
J2-3	A1-1 RECEIVER TEMP 1 HI	> 1M		
J2-4	A1-1 RECEIVER TEMP 1 LO	> 1M		
J2-5	A1-1 WARM LOAD TEMP HI	> 1M		
J2-6	A1-1 WARM LOAD TEMP LO	> 1M		
J2-7	A1-2 MOTOR TEMP HI	> 1M		
J2-8	A1-2 MOTOR TEMP LO	> 1M		
J2-9	A1-2 RECEIVER TEMP 1 HI	> 1M		
J2-10	A1-2 RECEIVER TEMP 1 LO	> 1M		
J2-11	A1-2 WARM LOAD TEMP HI	> 1M		
J2-12	A1-2 WARM LOAD TEMP LO	> 1M		
J2-13	No Connection	> 1M		
J2-14	No Connection	> 1M		
J2-15	No Connection	> 1M		
J2-16	No Connection	> 1M		
J2-17	No Connection	> 1M		
J2-18	No Connection	> 1M		
J2-19	No Connection	> 1M		
J2-20	No Connection	> 1M		
J2-21	No Connection	> 1M		
J2-22	A1-1 RECEIVER TEMP 2 HI	> 1M		
J2-23	A1-1 RECEIVER TEMP 2 LO	> 1M		
J2-24	No Connection	> 1M		
J2-25	No Connection	> 1M		
J2-26	No Connection	> 1M		
J2-27	No Connection	> 1M		
J2-28	A1-2 RECEIVER TEMP 2 HI	> 1M		
J2-29	A1-2 RECEIVER TEMP 2 LO	> 1M		
J2-30	No Connection	> 1M		
J2-31	No Connection	> 1M		
J2-32	No Connection	> 1M		
J2-33	No Connection	> 1M		
J2-34	No Connection	> 1M		
J2-35	No Connection	> 1M		
J2-36	No Connection	> 1M		
J2-37	No Connection	> 1M	> 1MΩ	Pass

EOS/AMSU-A1 System P/N 1356008  
Circle Test: 1<sup>st</sup> CPT Final CPT

Shop Order: 560863 SN: 202  
Sub CPT N/A LPT N/A

oper. 0580

J. Sanford 11-20-98  
Customer Representative Date

P. Khoury AMSU & RET Nov 12, 98  
Test Systems Engineer Date  
Quality Control NOV 1998 Date

TEST DATA SHEET NO. 1 (Sheet 3 of 6)  
Grounding Interface Test (Paragraph 3.3.2, Step 2)

J3 of Spacecraft Interface				
From Chassis Ground to	Pin Description	Required Resistance (Ohms)	Measured Value (Ohms)	Pass/Fail
J3-1	1553 INTERFACE DATA A HI	> 100K	> 100K	PASS
J3-2	1553 INTERFACE DATA A LO	> 100K	> 100K	
J3-3	No Connection	> 1M	> 1M $\Omega$	
J3-4	1553 INTERFACE DATA B LO	> 100K	> 100K	
J3-5	1553 INTERFACE DATA B HI	> 100K	> 100K	
J3-6	1553 INTERFACE DATA A SHIELD	< 1	0.19 $\Omega$	
J3-7	No Connection	> 1M	> 1M $\Omega$	
J3-8	No Connection	> 1M	> 1M $\Omega$	
J3-9	1553 INTERFACE DATA B SHIELD	< 1	0.21 $\Omega$	PASS

07LV.0580

EOS/AMSU-A1 System P/N 1356008

Shop Order: 560863

S/N: 202

Circle Test: 1<sup>st</sup> CPT Final CPT

Sub CPT N/A

LPT N/A

J. S. S. S. 11-20-98  
Customer Representative Date

R. Khoury 12 NOV 98  
AMSU A SEIT  
Test Systems Engineer Date  
NOV 19 1998  
Quality Control Date



TEST DATA SHEET NO. 1 (Sheet 4 of 6)  
Grounding Interface Test (Paragraph 3.3.2, Step 2)

J4 of Spacecraft Interface				
From Chassis Ground to	Pin Description	Required Resistance (Ohms)	Measured Value (Ohms)	Pass/Fail
J4-1	CHASSIS GROUND	< 1	0.14 $\Omega$	Pass
J4-2	8 SECOND SYNC PULSE TP	> 20K	110.1 K $\Omega$	
J4-3	PLO #2 LOCK TP	> 10K	21.7 K $\Omega$	
J4-4	PLO LOCK RTN (7/8)	< 2	1.04 $\Omega$	
J4-5	I/H & DUMP RTN (2/3)	< 1	0.34 $\Omega$	
J4-6	DUMP COMMAND TP	> 10K	240 M $\Omega$	
J4-7	No Connection	> 1M	> 1 M $\Omega$	
J4-8	CH 3 ANALOG OUT TP	> 100K	3.23 M $\Omega$	
J4-9	CH 4 ANALOG OUT TP	> 100K	3.22 M $\Omega$	
J4-10	CH 5 ANALOG OUT TP	> 100K	3.22 M $\Omega$	
J4-11	CH 6 ANALOG OUT TP	> 100K	3.25 M $\Omega$	
J4-12	CH 7 ANALOG OUT TP	> 100K	3.23 M $\Omega$	
J4-13	CH 8 ANALOG OUT TP	> 100K	3.24 M $\Omega$	
J4-14	CH 9 ANALOG OUT TP	> 100K	3.24 M $\Omega$	
J4-15	No Connection	> 1M	> 1 M $\Omega$	
J4-16	No Connection	> 1M	> 1 M $\Omega$	
J4-17	GSE COMMAND LSB	> 5K	9.99 K $\Omega$	
J4-18	GSE COMMAND MSB-1	> 5K	10.00 K $\Omega$	
J4-19	No Connection	> 1M	> 1 M $\Omega$	
J4-20	1.248 MHz CLOCK TP	> 100K	6.2 M $\Omega$	
J4-21	1.248 MHz CLOCK RTN (1)	< 1	0.29 $\Omega$	
J4-22	PLO #1 LOCK TP	> 10K	22.1 K $\Omega$	
J4-23	No Connection	> 1M	> 1 M $\Omega$	
J4-24	I/H COMMAND TP	> 20K	2.4 M $\Omega$	
J4-25	No Connection	> 1M	> 1 M $\Omega$	
J4-26	ANALOG OUT RTN (2/3)	< 1	0.26 $\Omega$	
J4-27	CH 10 ANALOG OUT TP	> 100K	3.2 M $\Omega$	
J4-28	CH 11 ANALOG OUT TP	> 100K	3.2 M $\Omega$	
J4-29	CH 12 ANALOG OUT TP	> 100K	3.2 M $\Omega$	
J4-30	CH 13 ANALOG OUT TP	> 100K	3.2 M $\Omega$	
J4-31	CH 14 ANALOG OUT TP	> 100K	3.2 M $\Omega$	
J4-32	CH 15 ANALOG OUT TP	> 100K	3.2 M $\Omega$	
J4-33	No Connection	> 1M	> 1 M $\Omega$	
J4-34	No Connection	> 1M	> 1 M $\Omega$	
J4-35	GSE COMMAND MSB	> 5K	9.99 K $\Omega$	
J4-36	GSE COMMAND RTN (1)	< 1	0.29 $\Omega$	
J4-37	No Connection	> 1M	> 1 M $\Omega$	Pass

EOS/AMSU-A1 System P/N 1356008  
Circle Test: 1<sup>st</sup> CPT Final CPT

Shop Order: 560863 S/N: 802  
Sub CPT \_\_\_\_\_ LPT \_\_\_\_\_

oper. 0580

R. Khoury (AMSU 4 SET)

12 NOV 98

J. S. [Signature] 11-20-98  
Customer Representative Date

Test Systems Engineer (200) NCV 19 1998 Date  
Quality Control Date

TEST DATA SHEET NO. 1 (Sheet 5 of 6)  
Grounding Interface Test (Paragraph 3.3.2, Step 2)

Source	Destination	Source Pin Description	Required Resistance (Ohms)	Measured Value (Ohms)	Pass/Fail*
J1-1	J1-2	+29V QUIET PWR BUS	<1	0.22 $\Omega$	Pass
J1-1	J1-14	+29V QUIET PWR BUS	<1	0.27 $\Omega$	
J1-1	J1-15	+29V QUIET PWR BUS	<1	0.24 $\Omega$	
J1-3	J1-4	29V QUIET BUS RTN	<1	0.30 $\Omega$	
J1-3	J1-16	29V QUIET BUS RTN	<1	0.33 $\Omega$	
J1-3	J1-17	29V QUIET BUS RTN	<1	0.34 $\Omega$	
J1-5	J1-6	+29V NOISY PWR BUS	<1	0.25 $\Omega$	
J1-5	J1-18	+29V NOISY PWR BUS	<1	0.33 $\Omega$	
J1-5	J1-19	+29V NOISY PWR BUS	<1	0.31 $\Omega$	
J1-7	J1-8	29V NOISY BUS RTN	<1	0.27 $\Omega$	
J1-7	J1-20	29V NOISY BUS RTN	<1	0.30 $\Omega$	
J1-7	J1-21	29V NOISY BUS RTN	<1	0.31 $\Omega$	
J1-9	J1-11	SURVIVAL PWR BUS A	<1	0.25 $\Omega$	
J1-10	J1-12	SURVIVAL BUS A RTN	<1	0.25 $\Omega$	
J1-22	J1-24	SURVIVAL PWR BUS B	<1	0.22 $\Omega$	
J1-23	J1-25	SURVIVAL BUS B RTN	<1	0.22 $\Omega$	
J1-1	J1-5	+29V QUIET PWR BUS	> 1M	> 1M $\Omega$	
J1-1	J1-7	+29V QUIET PWR BUS	> 1M		
J1-1	J1-9	+29V QUIET PWR BUS	> 1M		
J1-1	J1-10	+29V QUIET PWR BUS	> 1M		
J1-1	J1-22	+29V QUIET PWR BUS	> 1M		
J1-1	J1-23	+29V QUIET PWR BUS	> 1M		
J1-3	J1-5	29V QUIET BUS RTN	> 1M		
J1-3	J1-7	29V QUIET BUS RTN	> 1M		
J1-3	J1-9	29V QUIET BUS RTN	> 1M	> 1M $\Omega$	Pass

EOS/AMSU-A1 System P/N 1356008  
Circle Test: 1<sup>st</sup> CPT Final CPT

Shop Order: 560863 S/N: 202  
Sub CPT N/A LPT N/A

Op. 0580

J. Sanford 11-20-98  
Customer Representative Date

R. Khoury AMSU A SEPT 12 NOV 98  
Test Systems Engineer Date  
(200) NOV 19 1998  
Quality Control Date

TEST DATA SHEET NO. 1 (Sheet 6 of 6)  
Grounding Interface Test (Paragraph 3.3.2, Step 2)

Source	Destination	Source Pin Description	Required Resistance (Ohms)	Measured Value (Ohms)	Pass/Fail
J1-3	J1-10	29V QUIET BUS RTN	> 1M	> 1M $\Omega$	Pass
J1-3	J1-22	29V QUIET BUS RTN	> 1M		
J1-3	J1-23	29V QUIET BUS RTN	> 1M		
J1-5	J1-9	+29V NOISY PWR BUS	> 1M		
J1-5	J1-10	+29V NOISY PWR BUS	> 1M		
J1-5	J1-22	+29V NOISY PWR BUS	> 1M		
J1-5	J1-23	+29V NOISY PWR BUS	> 1M		
J1-7	J1-9	29V NOISY BUS RTN	> 1M		
J1-7	J1-10	29V NOISY BUS RTN	> 1M		
J1-7	J1-22	29V NOISY BUS RTN	> 1M		
J1-7	J1-23	29V NOISY BUS RTN	> 1M		
J1-9	J1-22	SURVIVAL PWR BUS A	> 1M		
J1-9	J1-23	SURVIVAL PWR BUS A	> 1M		
J1-10	J1-22	SURVIVAL BUS A RTN	> 1M		
J1-10	J1-23	SURVIVAL BUS A RTN	> 1M	> 1M $\Omega$	
J1-13	J1 OUTER SHELL	CHASSIS GROUND	< 1	0.29 $\Omega$	
J1-13	J2 OUTER SHELL	CHASSIS GROUND	< 1	0.30 $\Omega$	
J1-13	J3 OUTER SHELL	CHASSIS GROUND	< 1	0.31 $\Omega$	
J1-13	J4 OUTER SHELL	CHASSIS GROUND	< 1	0.24 $\Omega$	
J3-1	J3-5	1553 INTERFACE DATA A HI	> 100K	> 1M $\Omega$	
J3-1	J3-4	1553 INTERFACE DATA A HI	> 100K	> 1M $\Omega$	
J3-2	J3-5	1553 INTERFACE DATA A LO	> 100K	> 1M $\Omega$	
J3-2	J3-4	1553 INTERFACE DATA A LO	> 100K	> 1M $\Omega$	Pass

EOS/AMSU-A1 System P/N 1356008  
Circle Test: 1<sup>st</sup> CPT Final CPT

Shop Order: 560863 S/N: 202  
Sub CPT N/A LPT N/A

J. Sanford 11-20-98  
Customer Representative Date

R. Khoury 12 Nov 98  
Test Systems Engineer Date  
Quality Control 200 NOV 19 1998 Date

**TEST DATA SHEET NO. 2**  
Quiet Power Bus Operational Power Test (Paragraph 3.3.3.1.1)

Required Quiet Bus Voltage QBV (Volts)	Measured QBV (Volts)	PLO	Maximum Peak Quiet Bus Current QBI (Amps)	Required Power (Watts)	Calculated Peak Power (QBV x QBI) (Watts)	Pass/Fail
26.95 - 27.05	27.02	#1	2.55 A	≤94	69.0 WATTS	P
28.95 - 29.05	29.02	#1	2.37 A	≤94	68.78 W	P
30.95 - 31.05	31.02	#1	2.24 A	≤94	69.48 W	P
26.95 - 27.05	27.00	#2	2.58 A	≤94	69.66 W	P
28.95 - 29.10	29.03	#2	2.40 A	≤94	69.67 W	P
30.95 - 31.05	31.03	#2	2.25 A	≤94	69.82 W	P

Required Quiet Bus Voltage QBV (Volts)	Measured QBV (Volts)	PLO	Average Quiet Bus Current QBI (Amps)	Required Power (Watts)	Calculated Average Power (QBV x QBI) (Watts)	Pass/Fail
26.95 - 27.05	27.02	#1	2.47 A	≤86	66.74 WATTS	P
28.95 - 29.05	29.02	#1	2.31 A	≤86	67.04 W	P
30.95 - 31.05	31.02	#1	2.18 A	≤86	67.62 W	P
26.95 - 27.05	27.00	#2	2.50 A	≤86	67.50 W	P
28.95 - 29.10	29.03	#2	2.34 A	≤86	67.93 W	P
30.95 - 31.05	31.03	#2	2.17 A	≤86	67.34 W	P

OP 0580

EOS/AMSU-A1 System P/N 1356008

Shop Order: 560863

S/N: 202

Circle Test: 1<sup>st</sup> CPT

Final CPT

Sub CPT \_\_\_\_\_

J. Sanford  
Customer Representative

11-20-98  
Date

R. Hays  
Test Systems Engineer (7A)

(200)

11/16/98

Date  
NOV 19 1998

Quality Control

Date

TP52 PLOT#1

CAP TIM BUF

70.0 m

10.0 m

/Div

Real

500 DIV  
mA

V

-10.0 m

ExdXY 0.0

Sec

8.0

AVE I = 2.47 A

MAX I = 2.55 A

27.02 V

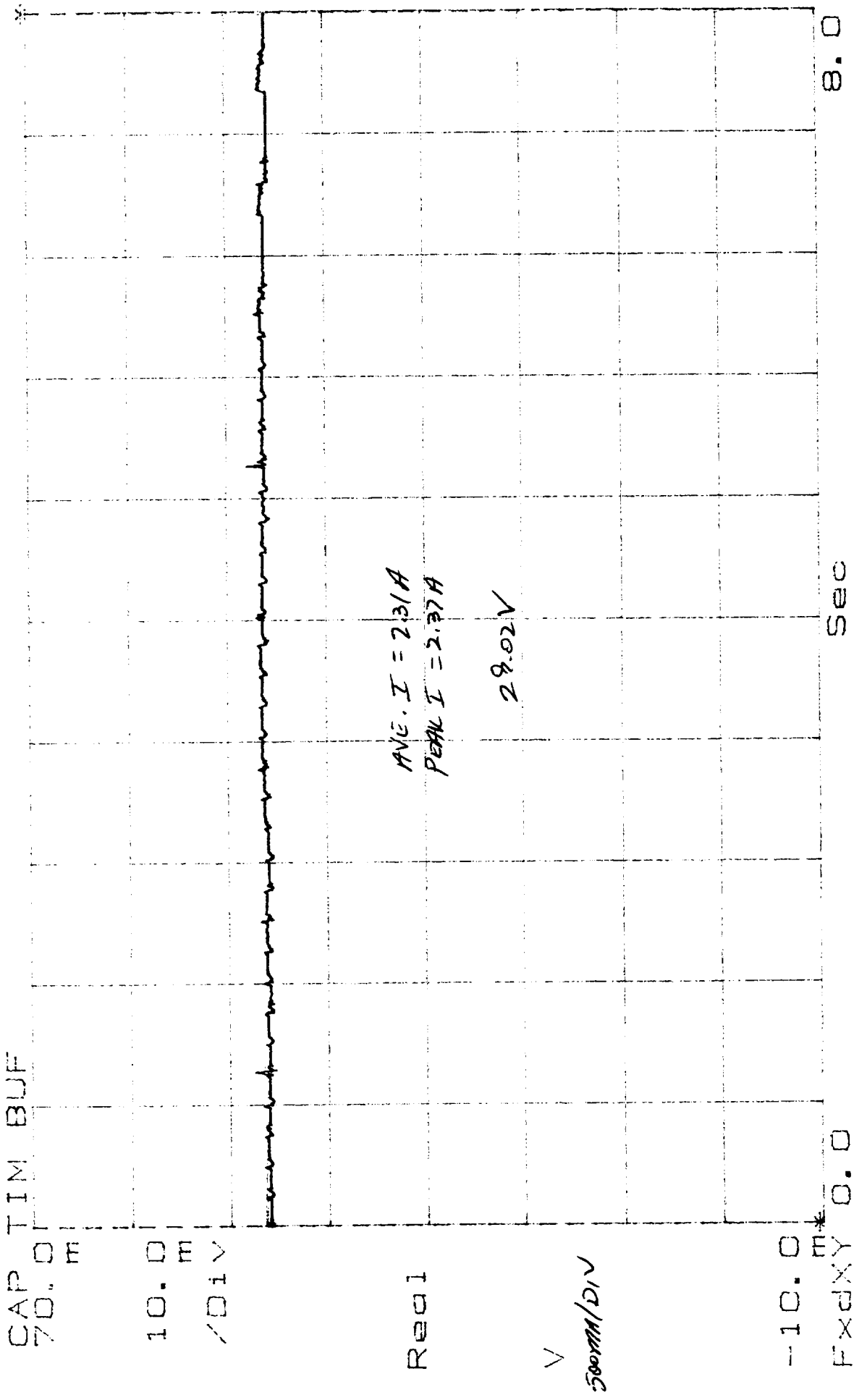
TP52 PLOT#1 #1  
S/N 202

R. J. J. J.  
11/16/98

5.0

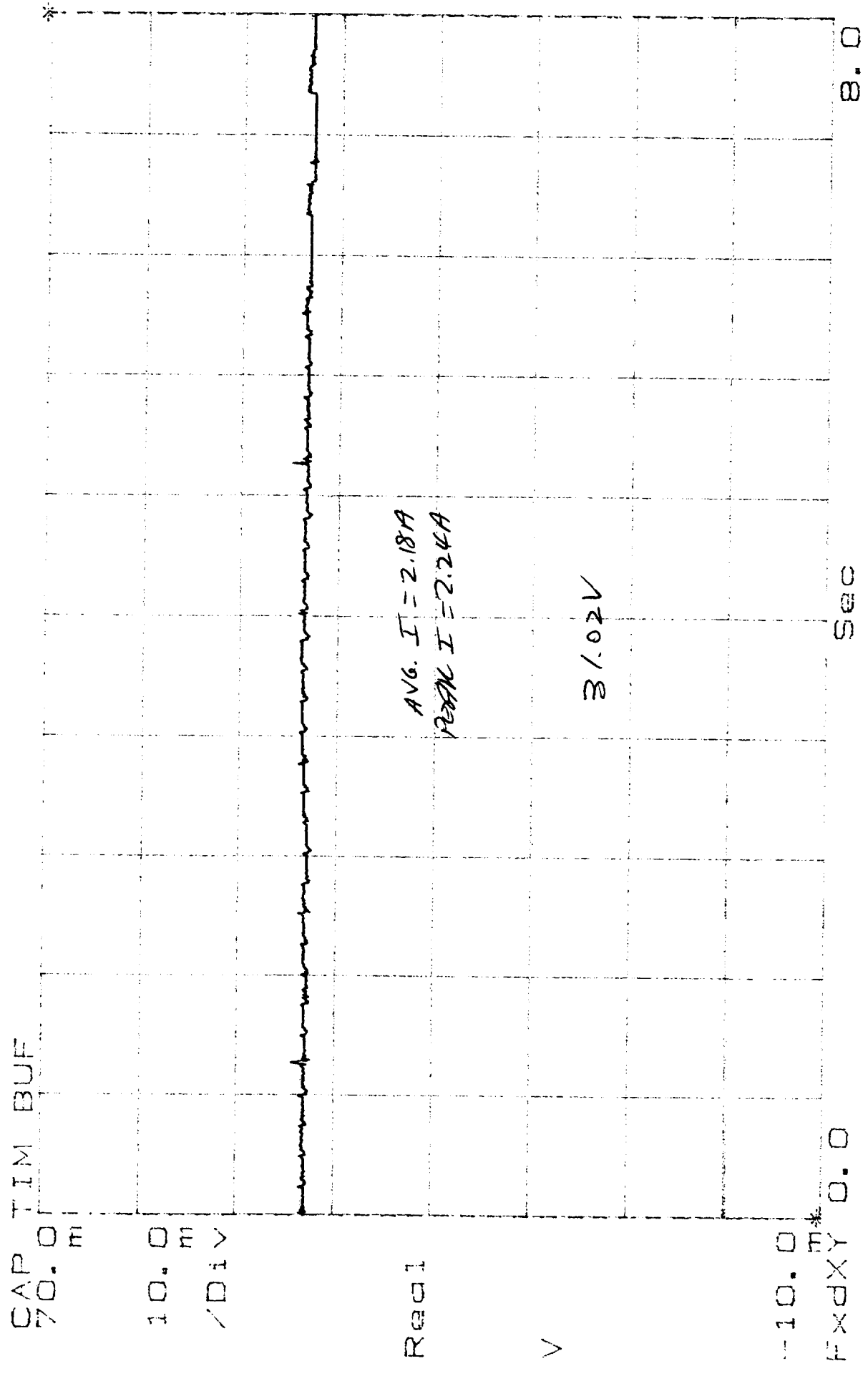
000000

Y:\2005\05\05 AY-18.123-11



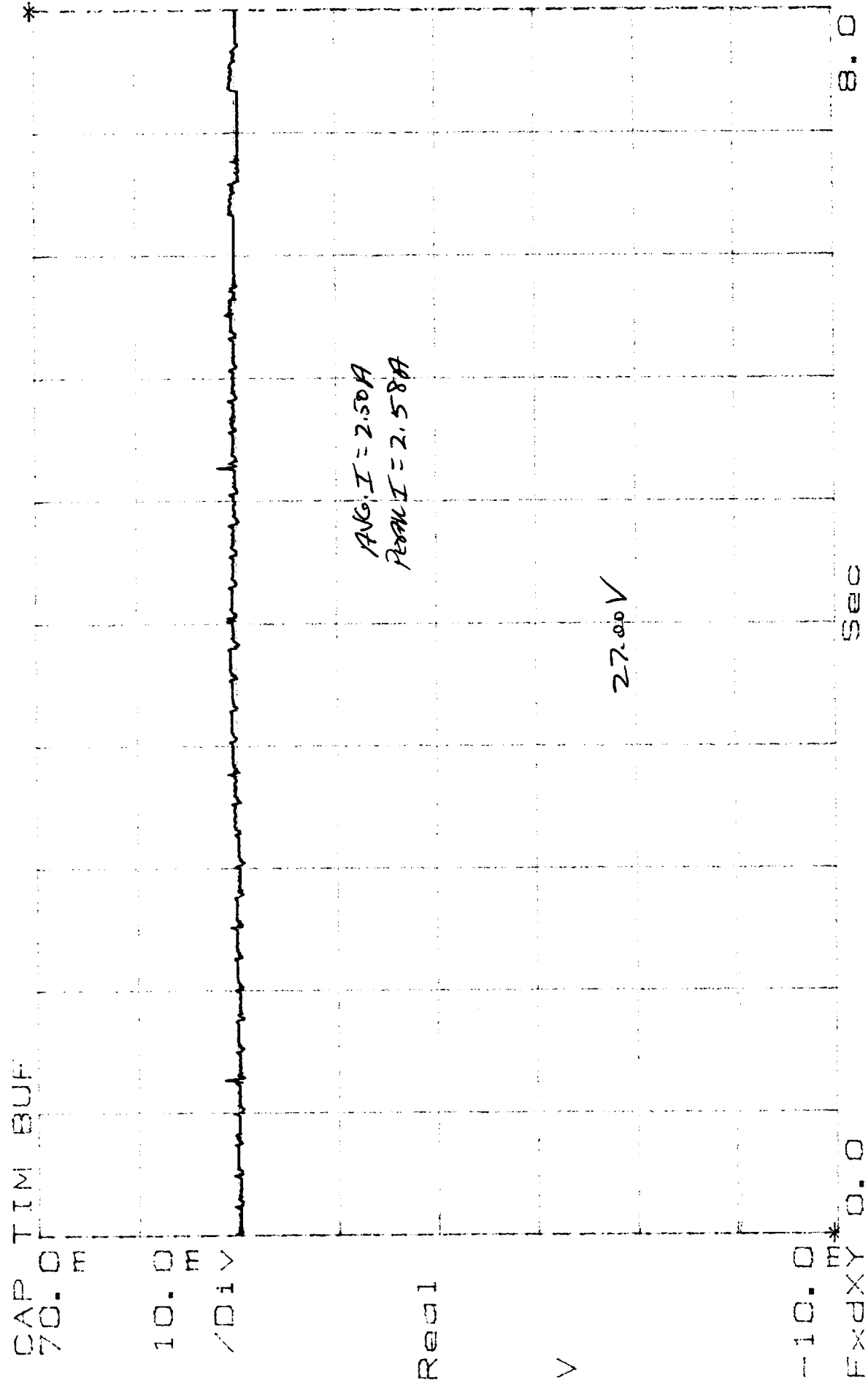
PLO #1 A/S/N 202 R. Day 11/16/88 TDS2 P.3.33.1.1

TPS20910-100 100mA



Plot #1 TPS20910-100 R.641

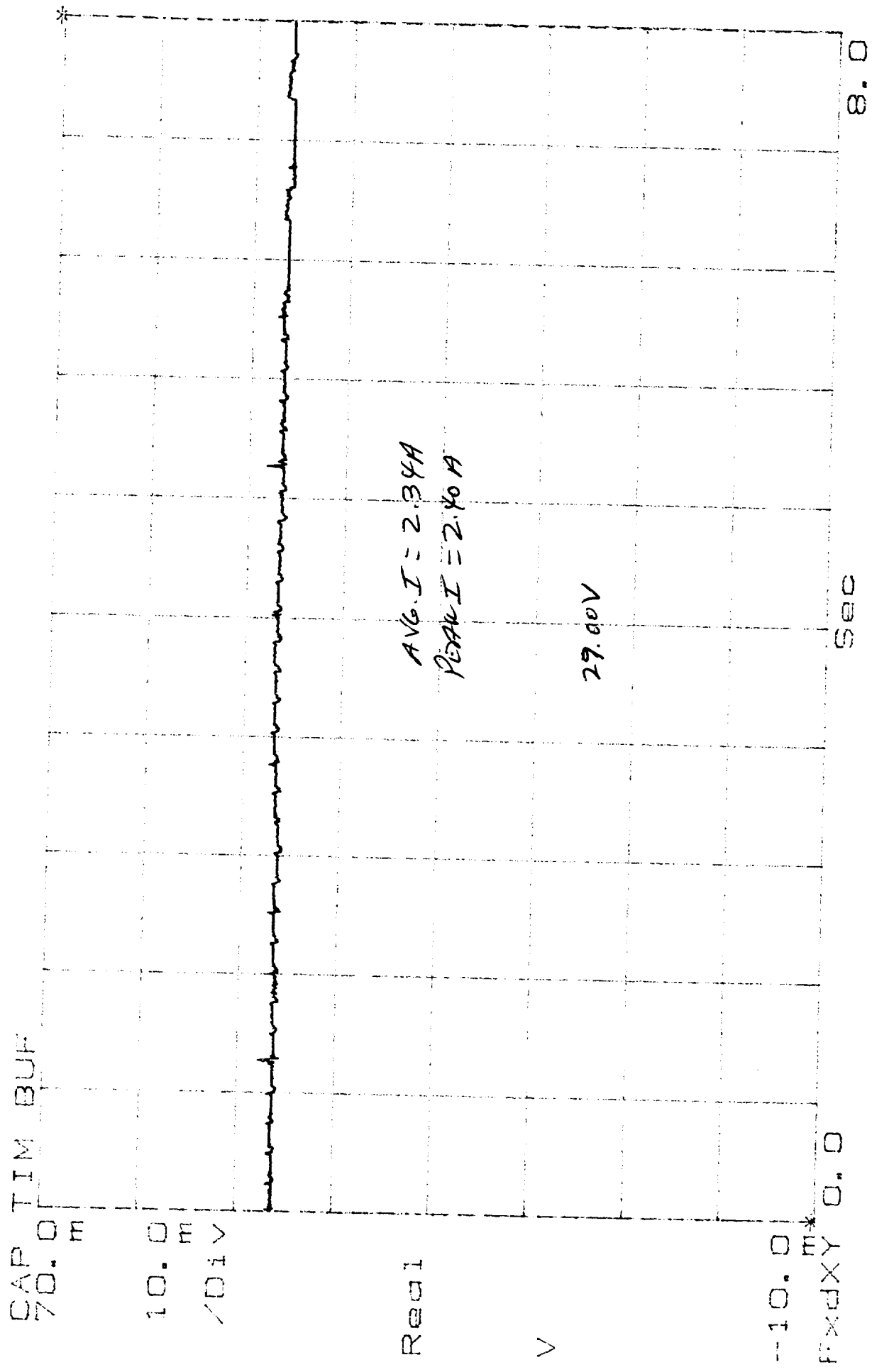
10-308.034 AY-50.9347



Plot#2  
TDS 2  
ASIN202  
P.3.3.3.1.1  
R. Heil  
11/16/98



300A.0000 A YOLLES. 000000



PL0 #2 TDS2 R. Bach  
11/16/88

CAP. TIM BUF  
 70.0E  
 10.0E  
 /DIV  
 Real  
 V  
 AVE. I = 2.17A  
 REAL I = 2.25A  
 31.03V  
 -10.0E  
 EXDXY 0.0  
 8.0

**TEST DATA SHEET NO. 3**  
Quiet Power Bus Operational Power Test (LPT) (Paragraph 3.3.3.1.2)

Required Quiet Bus Voltage QBV (Volts)	Measured QBV (Volts)	Average Quiet Bus Current QBI (Amps)	Required Power (Watts)	Calculated Average Power (QBV x QBI) (Watts)	Pass/Fail
28.95 - 29.05	29.00	2.21	<86	64.09	P

EOS/AMSU-A1 System P/N 1356008

LPT N/A FINAL CPT.

Shop Order: 560863

S/N: 202

J. Sanford 11-20-98  
Customer Representative Date

R. Hall 11/18/98  
Test Systems Engineer (1A) Date  
(200) NOV 19 1998  
Quality Control Date

**TEST DATA SHEET NO. 4**  
Quiet Power Bus Turn On Transient Test (Paragraph 3.3.3.1.3)

**+31 Volts**

Parameter	Measured/Calculated	Required	Pass/Fail
Peak Current	4.94A <del>5.22A</del> 1.68Amps	<10.6 Amps	P
Pulse Width (Steady State)	218 ms	<250 msec	↓
Rate of Change(slope): dI/dT	9.1 mA/μs	<677 mA/μs	↓
Pulse Width (Transient)	59.18 ms	<100 msec	↓

**+29 Volts**

Parameter	Measured/Calculated	Required	Pass/Fail
Peak Current	4.42 Amps	<10.6 Amps	P
Pulse Width (Steady State)	226.8 ms	<250 msec	↓
Rate of Change(slope): dI/dT	8.4 mA/μs	<677 mA/μs	↓
Pulse Width (Transient)	59 ms	<100 msec	↓

**+27 Volts**

Parameter	Measured/Calculated	Required	Pass/Fail
Peak Current	3.9A <del>4.1A</del> 1.1A Amps	<10.6 Amps	P
Pulse Width (Steady State)	233.6 ms	<250 msec	↓
Rate of Change(slope): dI/dT	2.47 mA/μs	<677 mA/μs	↓
Pulse Width (Transient)	62.8 ms	<100 msec	↓

EOS/AMSU-A1 System P/N: 1356008 Shop Order: 560863 S/N: 202

Circle Test: 1st CPT Final CPT Sub CPT

J. Sanford 11-20-98  
Customer Representative Date

R. Haig 11/16/98  
Test Systems Engineer (200) Date  
Quality Control NOV 19 1998 Date



011  
012  
013  
014  
015  
016  
017  
018  
019  
020  
021  
022  
023  
024  
025  
026  
027  
028  
029  
030  
031  
032  
033  
034  
035  
036  
037  
038  
039  
040  
041  
042  
043  
044  
045  
046  
047  
048  
049  
050  
051  
052  
053  
054  
055  
056  
057  
058  
059  
060  
061  
062  
063  
064  
065  
066  
067  
068  
069  
070  
071  
072  
073  
074  
075  
076  
077  
078  
079  
080  
081  
082  
083  
084  
085  
086  
087  
088  
089  
090  
091  
092  
093  
094  
095  
096  
097  
098  
099  
100  
101  
102  
103  
104  
105  
106  
107  
108  
109  
110  
111  
112  
113  
114  
115  
116  
117  
118  
119  
120  
121  
122  
123  
124  
125  
126  
127  
128  
129  
130  
131  
132  
133  
134  
135  
136  
137  
138  
139  
140  
141  
142  
143  
144  
145  
146  
147  
148  
149  
150  
151  
152  
153  
154  
155  
156  
157  
158  
159  
160  
161  
162  
163  
164  
165  
166  
167  
168  
169  
170  
171  
172  
173  
174  
175  
176  
177  
178  
179  
180  
181  
182  
183  
184  
185  
186  
187  
188  
189  
190  
191  
192  
193  
194  
195  
196  
197  
198  
199  
200  
201  
202  
203  
204  
205  
206  
207  
208  
209  
210  
211  
212  
213  
214  
215  
216  
217  
218  
219  
220  
221  
222  
223  
224  
225  
226  
227  
228  
229  
230  
231  
232  
233  
234  
235  
236  
237  
238  
239  
240  
241  
242  
243  
244  
245  
246  
247  
248  
249  
250  
251  
252  
253  
254  
255  
256  
257  
258  
259  
260  
261  
262  
263  
264  
265  
266  
267  
268  
269  
270  
271  
272  
273  
274  
275  
276  
277  
278  
279  
280  
281  
282  
283  
284  
285  
286  
287  
288  
289  
290  
291  
292  
293  
294  
295  
296  
297  
298  
299  
300  
301  
302  
303  
304  
305  
306  
307  
308  
309  
310  
311  
312  
313  
314  
315  
316  
317  
318  
319  
320  
321  
322  
323  
324  
325  
326  
327  
328  
329  
330  
331  
332  
333  
334  
335  
336  
337  
338  
339  
340  
341  
342  
343  
344  
345  
346  
347  
348  
349  
350  
351  
352  
353  
354  
355  
356  
357  
358  
359  
360  
361  
362  
363  
364  
365  
366  
367  
368  
369  
370  
371  
372  
373  
374  
375  
376  
377  
378  
379  
380  
381  
382  
383  
384  
385  
386  
387  
388  
389  
390  
391  
392  
393  
394  
395  
396  
397  
398  
399  
400  
401  
402  
403  
404  
405  
406  
407  
408  
409  
410  
411  
412  
413  
414  
415  
416  
417  
418  
419  
420  
421  
422  
423  
424  
425  
426  
427  
428  
429  
430  
431  
432  
433  
434  
435  
436  
437  
438  
439  
440  
441  
442  
443  
444  
445  
446  
447  
448  
449  
450  
451  
452  
453  
454  
455  
456  
457  
458  
459  
460  
461  
462  
463  
464  
465  
466  
467  
468  
469  
470  
471  
472  
473  
474  
475  
476  
477  
478  
479  
480  
481  
482  
483  
484  
485  
486  
487  
488  
489  
490  
491  
492  
493  
494  
495  
496  
497  
498  
499  
500  
501  
502  
503  
504  
505  
506  
507  
508  
509  
510  
511  
512  
513  
514  
515  
516  
517  
518  
519  
520  
521  
522  
523  
524  
525  
526  
527  
528  
529  
530  
531  
532  
533  
534  
535  
536  
537  
538  
539  
540  
541  
542  
543  
544  
545  
546  
547  
548  
549  
550  
551  
552  
553  
554  
555  
556  
557  
558  
559  
560  
561  
562  
563  
564  
565  
566  
567  
568  
569  
570  
571  
572  
573  
574  
575  
576  
577  
578  
579  
580  
581  
582  
583  
584  
585  
586  
587  
588  
589  
590  
591  
592  
593  
594  
595  
596  
597  
598  
599  
600  
601  
602  
603  
604  
605  
606  
607  
608  
609  
610  
611  
612  
613  
614  
615  
616  
617  
618  
619  
620  
621  
622  
623  
624  
625  
626  
627  
628  
629  
630  
631  
632  
633  
634  
635  
636  
637  
638  
639  
640  
641  
642  
643  
644  
645  
646  
647  
648  
649  
650  
651  
652  
653  
654  
655  
656  
657  
658  
659  
660  
661  
662  
663  
664  
665  
666  
667  
668  
669  
670  
671  
672  
673  
674  
675  
676  
677  
678  
679  
680  
681  
682  
683  
684  
685  
686  
687  
688  
689  
690  
691  
692  
693  
694  
695  
696  
697  
698  
699  
700  
701  
702  
703  
704  
705  
706  
707  
708  
709  
710  
711  
712  
713  
714  
715  
716  
717  
718  
719  
720  
721  
722  
723  
724  
725  
726  
727  
728  
729  
730  
731  
732  
733  
734  
735  
736  
737  
738  
739  
740  
741  
742  
743  
744  
745  
746  
747  
748  
749  
750  
751  
752  
753  
754  
755  
756  
757  
758  
759  
760  
761  
762  
763  
764  
765  
766  
767  
768  
769  
770  
771  
772  
773  
774  
775  
776  
777  
778  
779  
780  
781  
782  
783  
784  
785  
786  
787  
788  
789  
790  
791  
792  
793  
794  
795  
796  
797  
798  
799  
800  
801  
802  
803  
804  
805  
806  
807  
808  
809  
810  
811  
812  
813  
814  
815  
816  
817  
818  
819  
820  
821  
822  
823  
824  
825  
826  
827  
828  
829

10

**Figure 1**

CAR. TIM. BUF.

Q. 23

म  
॥  
॥  
॥

7

100

➤

□  
—  
—

三

□ □ Y X □

0  
0  
0

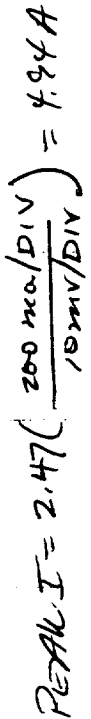
31.01/2

2021/5/14

P. 3. 3. 3. 1. 3

L. Davis

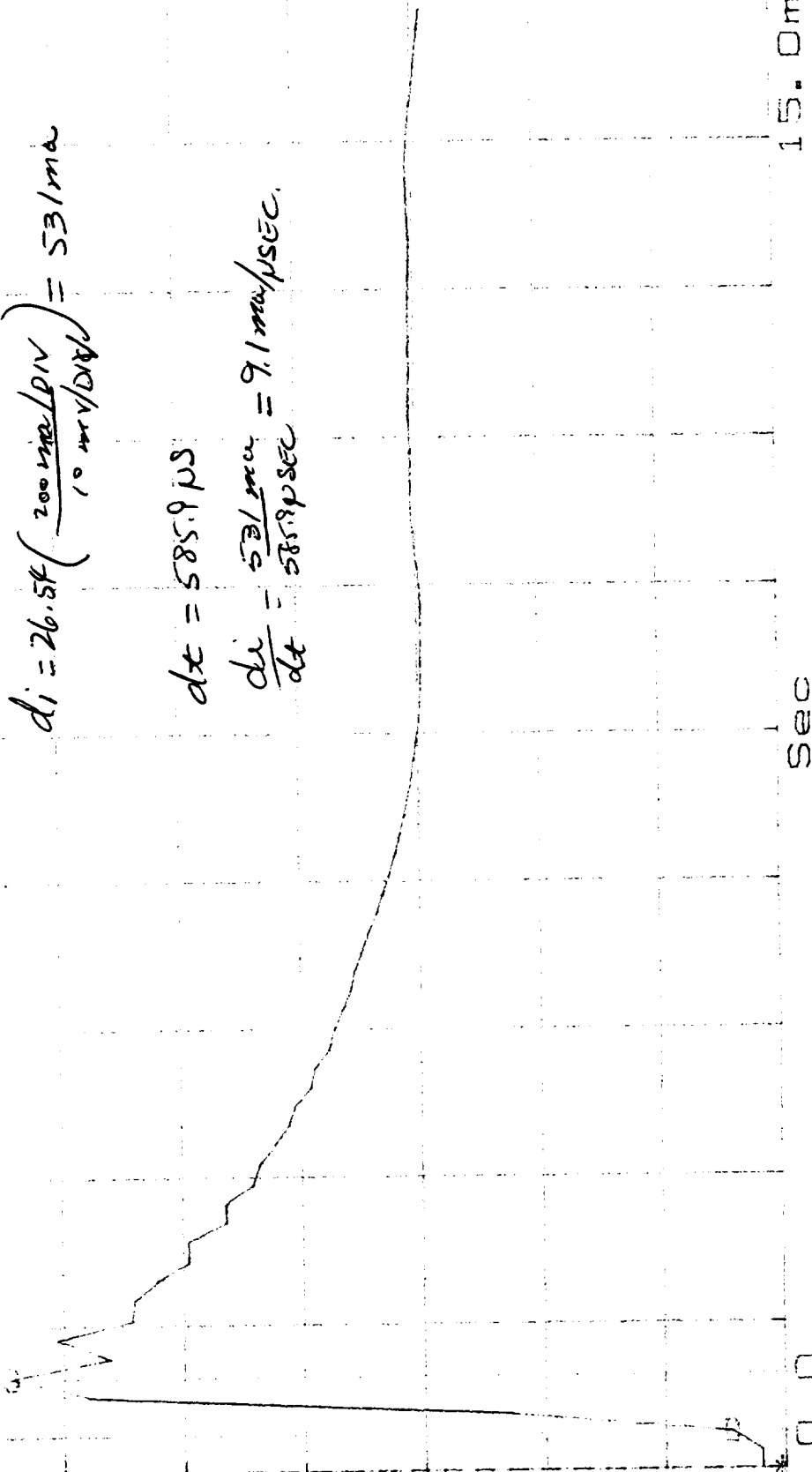
8/9/11



$$d_i = 26.5k \left( \frac{200 \text{ mV/DIV}}{10 \text{ mV/DIV}} \right) = 53 \text{ mV}$$

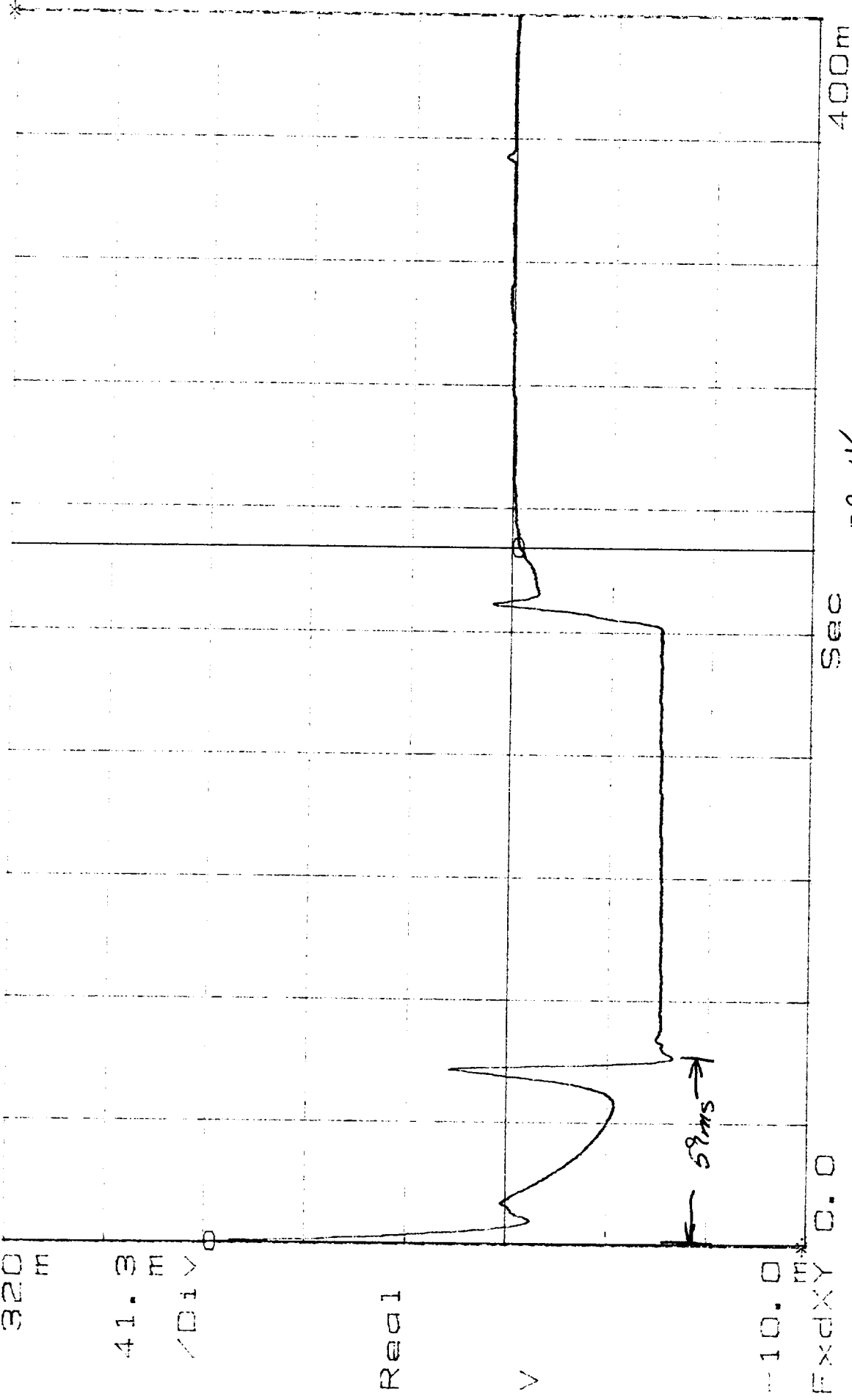
$$dx = 585.9 \mu s$$

$$\frac{di}{dt} = \frac{53 \text{ mA}}{58.9 \mu\text{SEC}} = 9.1 \text{ mA}/\mu\text{SEC.}$$



$X=227.5\text{ms}$     $\Delta X=226.8\text{ms}$     $Y=-9.6\text{mV}$     $\Delta Y=123.6\text{mV}$   
 $Y_0=111.036\text{m}$     $\Delta Y_0=123.7\text{mV}$

CAP TIM BUF



29.01V  
 11/5/2012  
 R. [signature]

$\Delta Y = 245.8 \text{ mV}$

$Y = -9.6 \text{ m}$

$X = 390.6 \mu\text{S}$     $\Delta X = 585.9 \mu\text{S}$   
 $Y = 14.0526 \text{ m}$     $\Delta Y = 219.9 \text{ mV}$

CAP TIM BUF

320 F

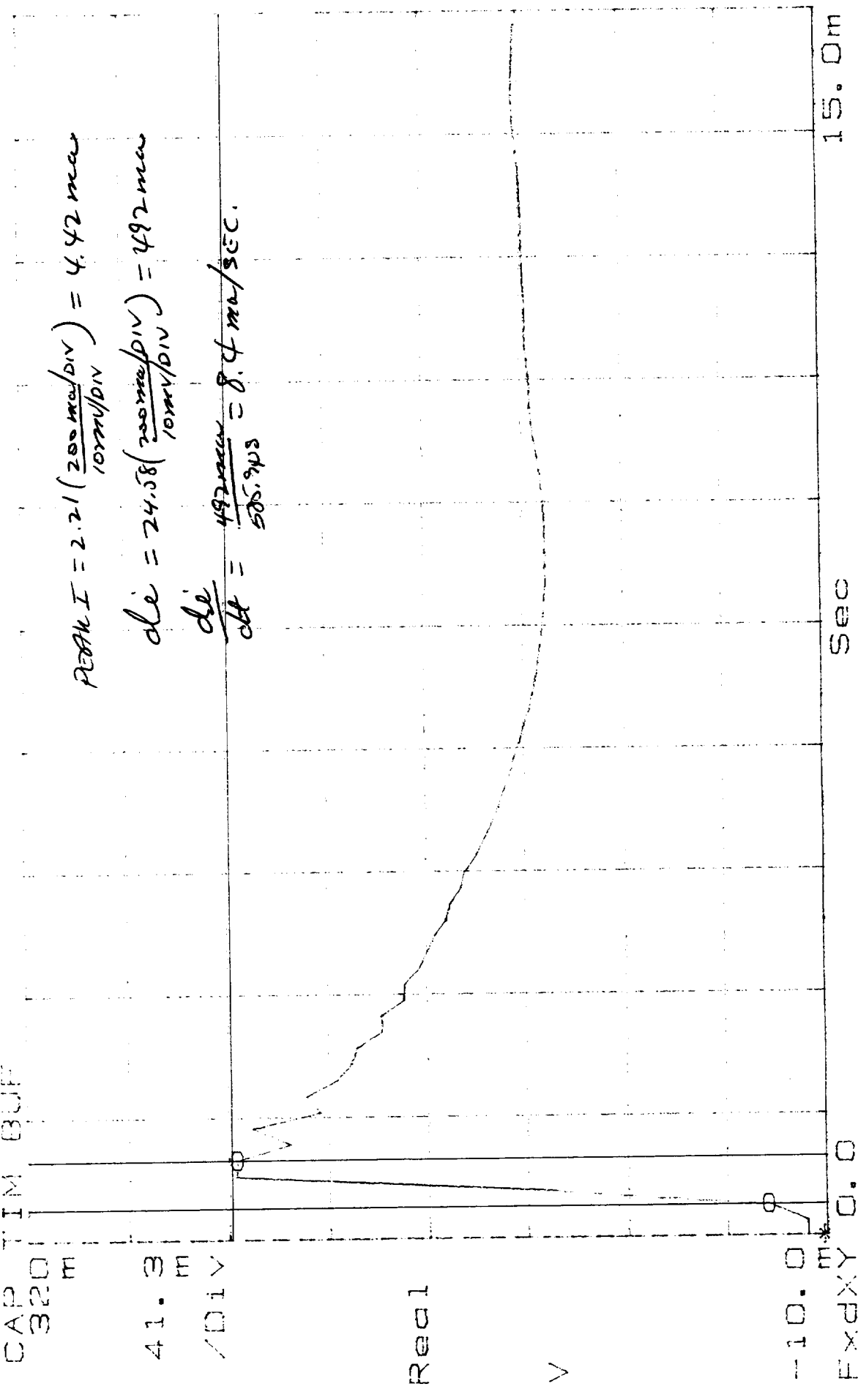
41.3 F

/DIV

$$\text{Peak } I = 2.21 \left( \frac{200 \text{ mV/DIV}}{10 \text{ mV/DIV}} \right) = 4.42 \text{ mA}$$

$$dI = 24.58 \left( \frac{200 \text{ mV/DIV}}{10 \text{ mV/DIV}} \right) = 492 \text{ mA}$$

$$\frac{dI}{dt} = \frac{492 \text{ mA}}{58.9 \mu\text{s}} = 8.4 \text{ mA/SEC.}$$

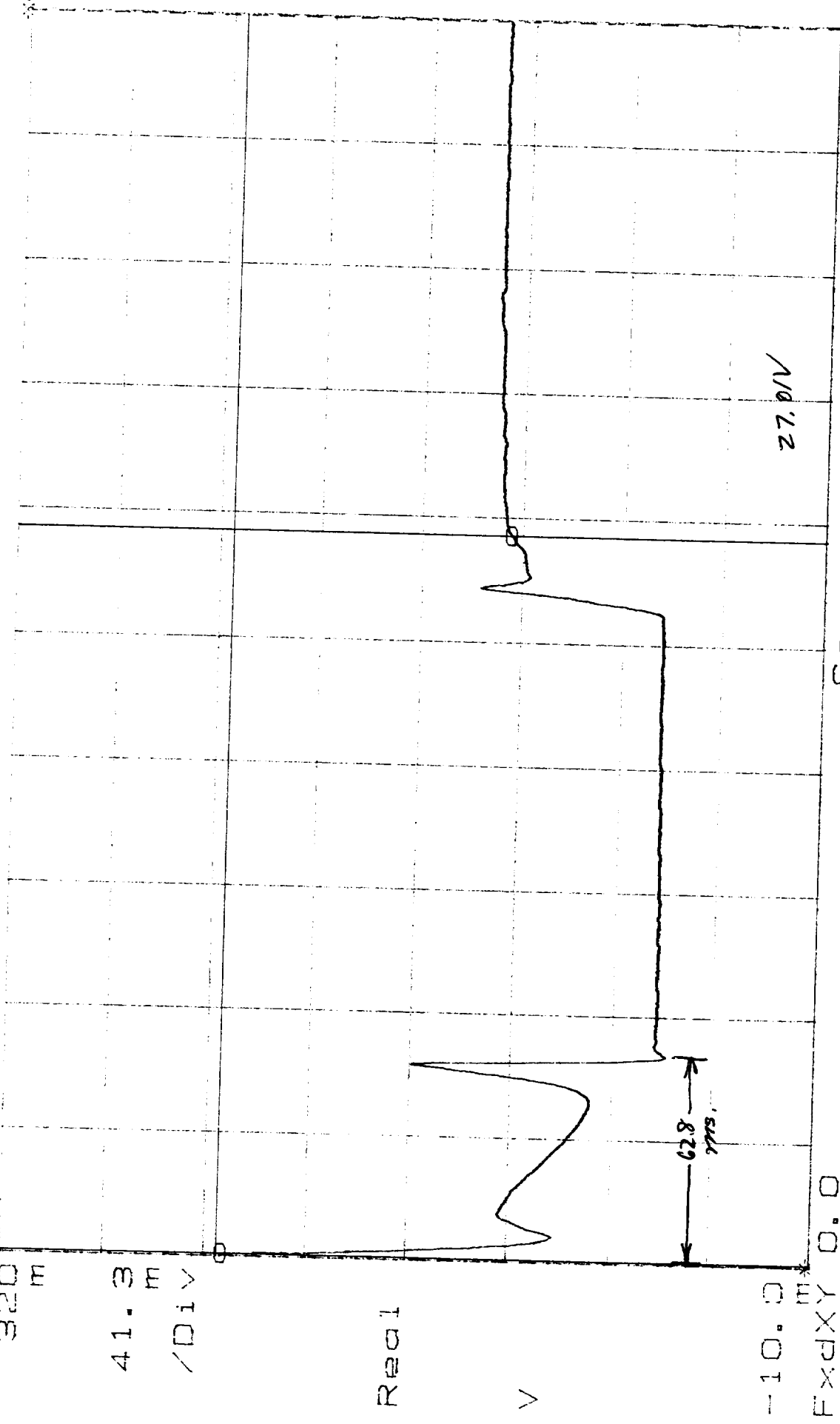


29.01 V   *R. Keith*  
A15/11/2012   7.333.1.3   11/16/98



$X=976.6\mu S$      $\Delta X=233.6mS$      $Y=-9.6m$      $\Delta Y=241.8mV$   
 $Y_0=230.38m$      $\Delta Y_0=112.3mV$

CAP TIM BUF



400m

Sec

-10.0m

EXDXY 0.0

A15N202  
 R. Hill,

P.3.3.3.1.3

$\Delta Y = 239.8 \text{ mV}$

$Y = -9.6 \text{ m}$

$X = 781.2 \mu\text{S}$   $\Delta X = 195.3 \mu\text{S}$   
 $Y_a = 201.916 \text{ m}$   $\Delta Y_a = 129.4 \text{ mV}$

CAP TIM BUF

320

41.3  
m  
/Div

$1.95 \times 10^{-11} \times 198$   
 $\text{Peak } I = 2.39 (2.00 \text{ m/DIV}) = 482 \text{ A}$   
 $di = 29.9 (2.00 \text{ m/DIV}) = 482 \text{ mV}$

$\frac{di}{dt} = \frac{482 \text{ mV}}{195.3 \mu\text{S}} = 2.47 \text{ mA/SEC}$

Real

V

-10.0 m

ExdY 0.0

Sec

5.0m

27.01V  
A/S/N 202  
P.3.3.3.1.3  
R. H. H. H.  
11/16/98

**TEST DATA SHEET NO. 5**  
Noisy Power Bus Operational Power Test (Paragraph 3.3.3.2.1)

Required Noisy Bus Voltage NBV (Volts)	Measured NBV (Volts)	Required Peak Current (Amps)	Maximum Peak Noisy Bus Current NBI (Amps)	Required Peak Power (Watts)	Calculated Peak Power (NBV x NBI) (Watts)	Pass/Fail
26.95 - 27.05	27.01	≤1	.990	≤40	26.7	P
28.95 - 29.05	29.01	≤1	.973	≤40	28.2	P
30.95 - 31.05	31.01	≤1	.965	≤40	29.9	P

Required Noisy Bus Voltage NBV (Volts)	Measured NBV (Volts)	Average Noisy Bus Current NBI (Amps)/sec	Required Average Power (Watts)	Calculated Average Power (NBV x NBI) (Watts)	Pass/Fail
26.95 - 27.05	27.01	.118	≤8	3.19	P
28.95 - 29.05	29.01	.122	≤8	3.54	P
30.95 - 31.05	31.01	.121	≤8	3.75	P

Required Noisy Bus Voltage NBV (Volts)	Measured NBV (Volts)	Bus Current During the I/H, D. Period	Pass/Fail
26.95 - 27.05	27.01	30.0 ma * 15.1 ma **	Not Applicable
28.75 - 29.05	29.01	31.1 ma * 15.6 ma **	Not Applicable
30.95 - 31.05	31.01	34.0 ma * 18.0 ma **	Not Applicable

\* Between beams  
\*\* Between cal tests

EOS/AMSU-A1 System P/N 1356008 Shop Order 560863 S/N: 202  
Circle Test: 1<sup>st</sup> CPT Final CPT Sub CPT \_\_\_\_\_

J. Sanford 11-20-98  
Customer Representative Date

R. Hail 11/17/98  
Test Systems Engineer 7A NOV 19 1998  
Quality Control Date



X=7.9727 Sec  
Ya=735.033  $\mu$ V

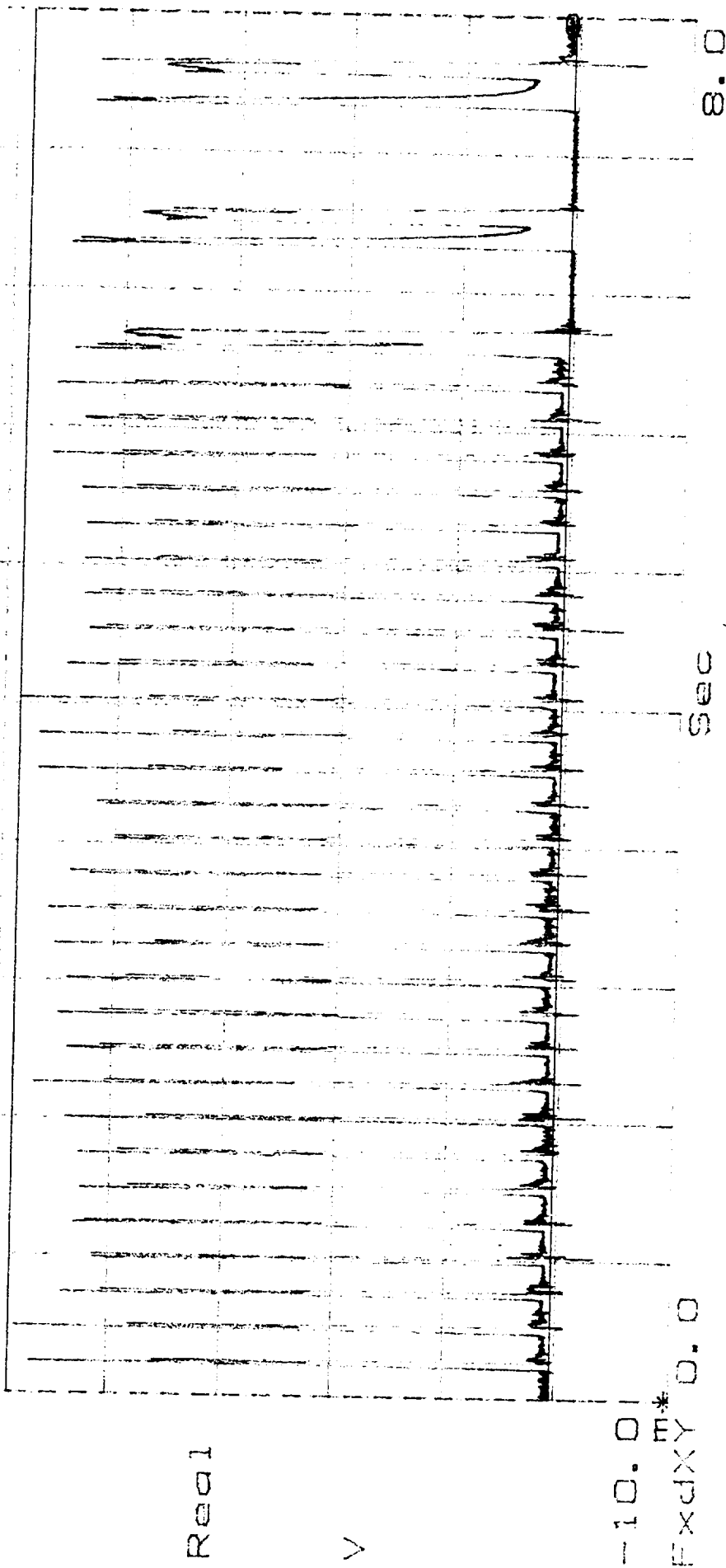
CAP TIM BUF

70.0 m

10.0 m

1 Div

Y=48.6667m  $\Delta Y=48.24$  mV



-10.01

mV

EXDXY 0.0

Sec

31.01V

P. 3.3.3.2.1

A/S/N202

*L. Hail*  
11/1/89

Y=48.6667m ΔY=48.24mV

X=7.9727 Sec  
Y=47.2687mV

M:CAP TIM REC  
70.0m

10.0m  
V/DIV

Real

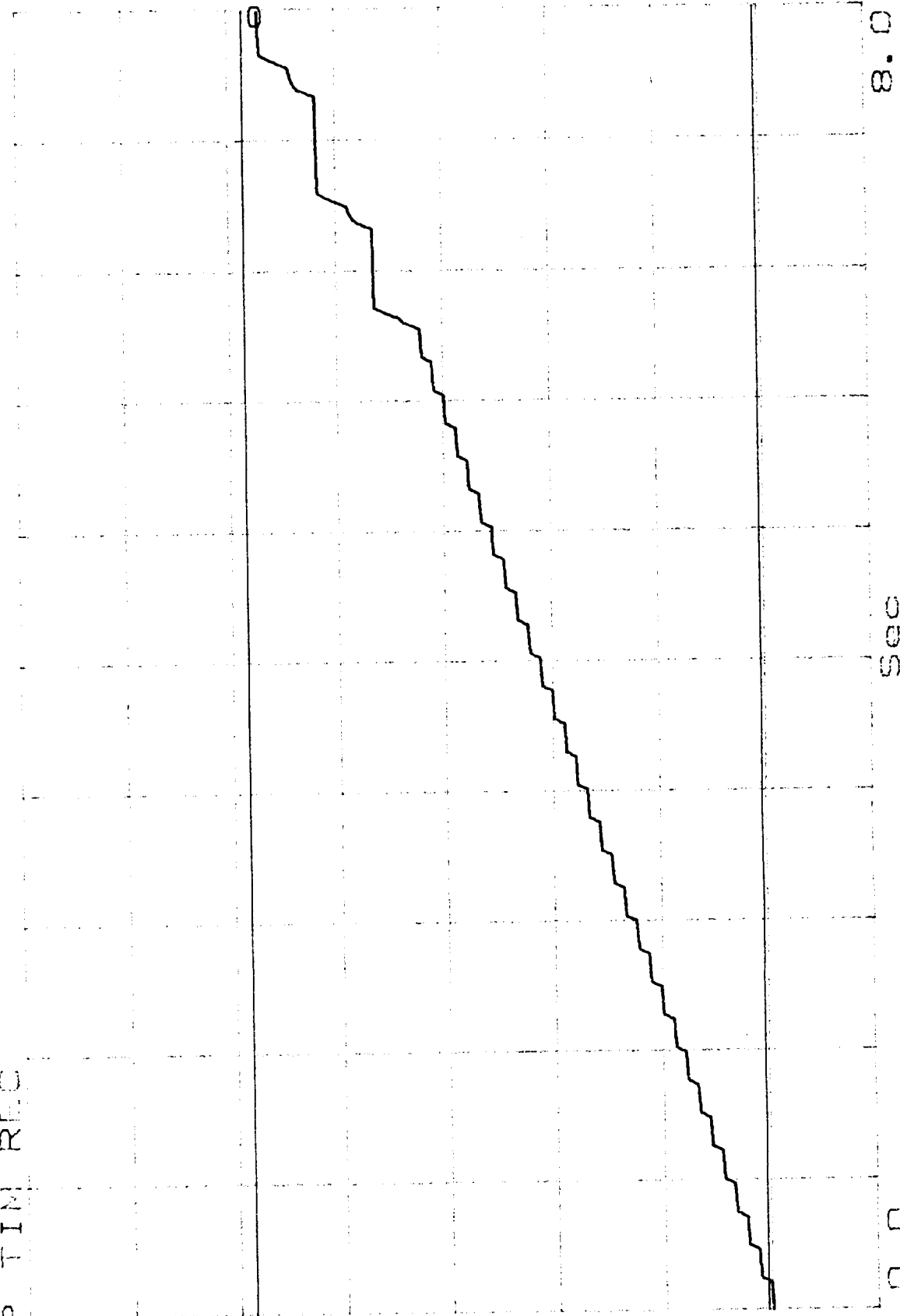
V

-10.0m  
EXDXY 0.0

Sec

31.0V  
A15/11/202  
P.3.3.3.2.1

*R. Hill*  
11/11/88



X=97.656mSec  
 Y=598.907μV  
 CAP TIM BUF  
 70.0E

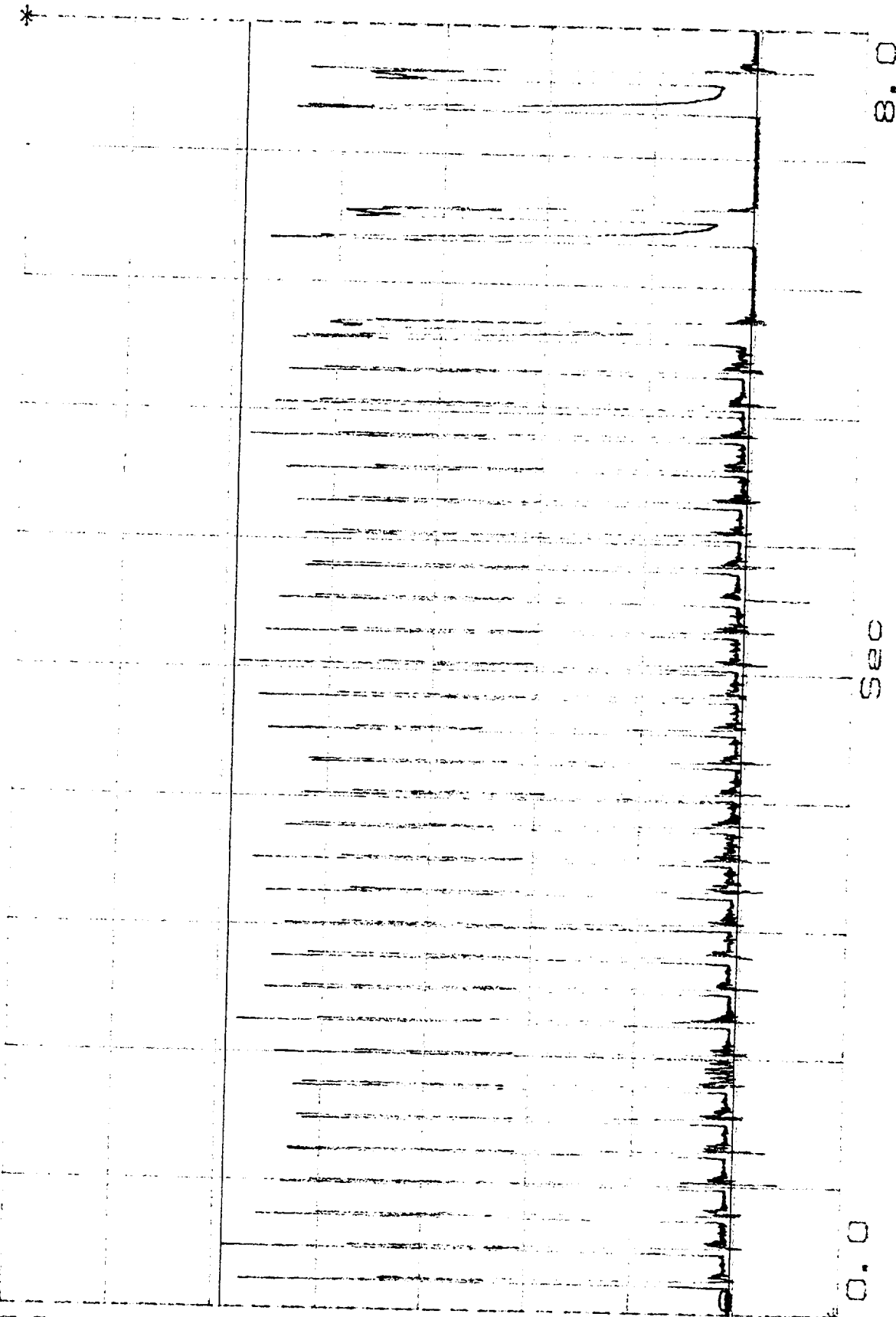
Y=327.27μ ΔY=48.68mV

10.0E  
 /Div

Real

V

-10.0E  
 EXPY 0.0

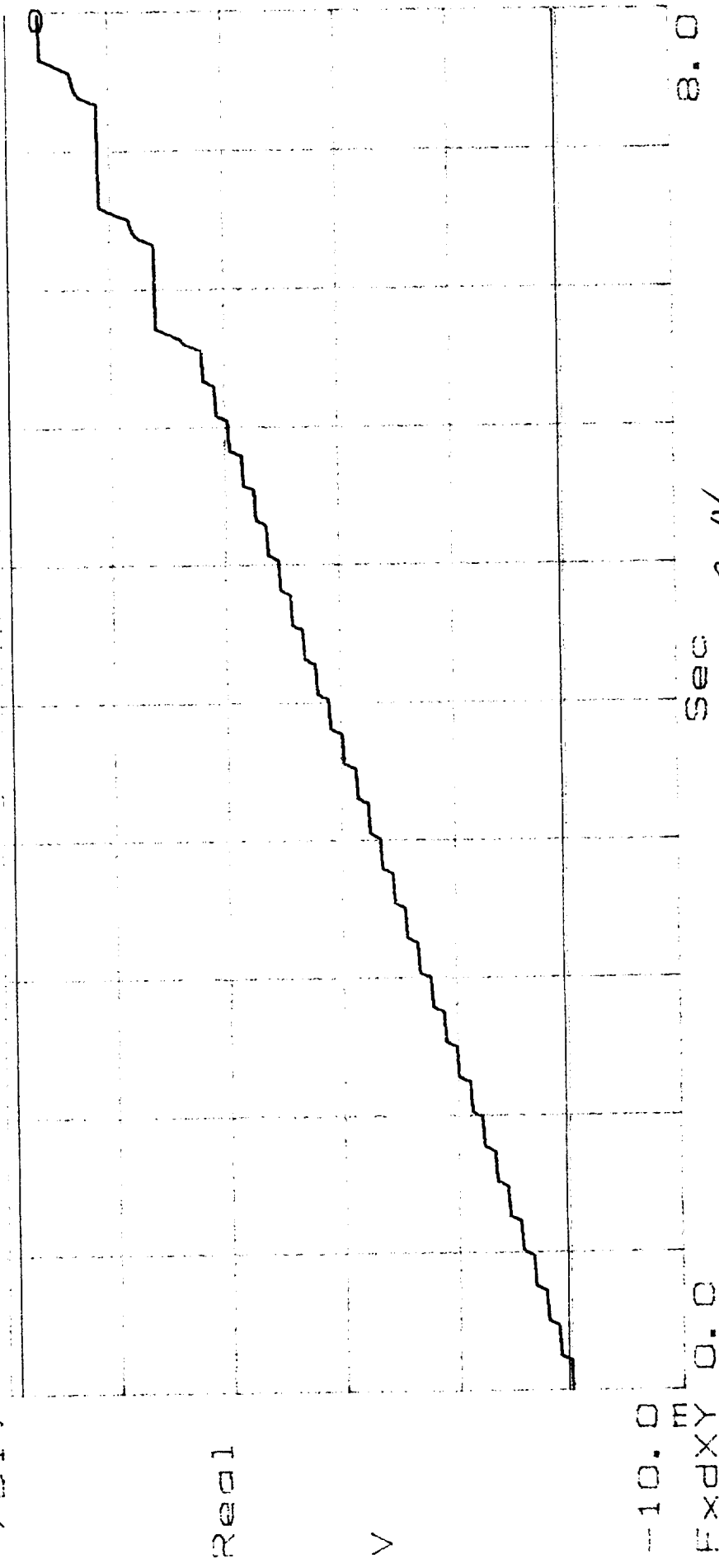


29/10/11 11:51:20  
 K. H. H.

Y=327.27  $\mu$   $\Delta Y=48.68mV$

X=7.9727 Sec  
Y=46.1568mV  
M:CAP TIM REC  
70.0 m

10.0 m  
/Div

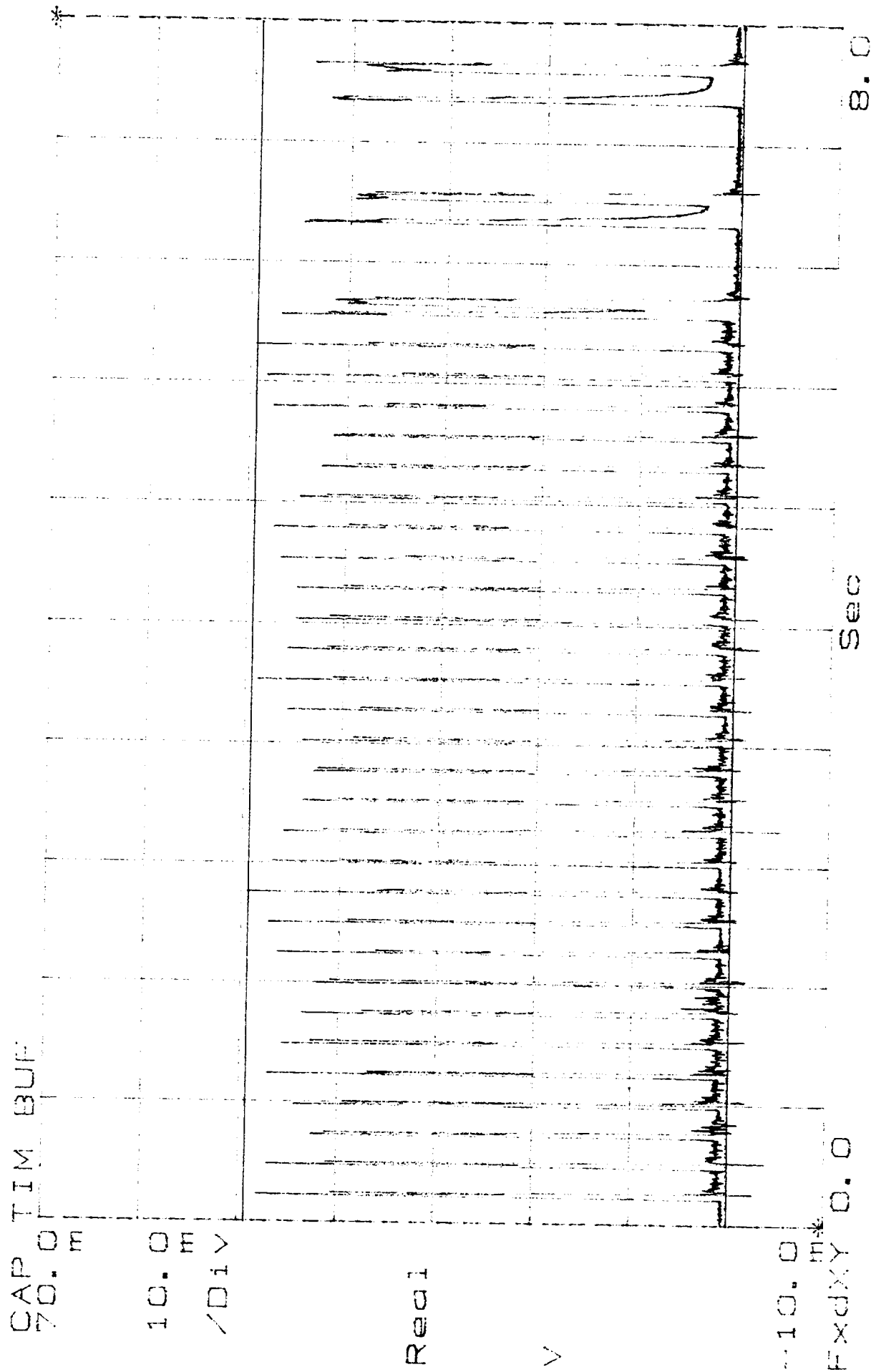


29.0V

P.3.3.3.2.1 A1 8/12/2027  
R. Taylor  
11/16/98



Y=49.297m      ΔY=49.5mV



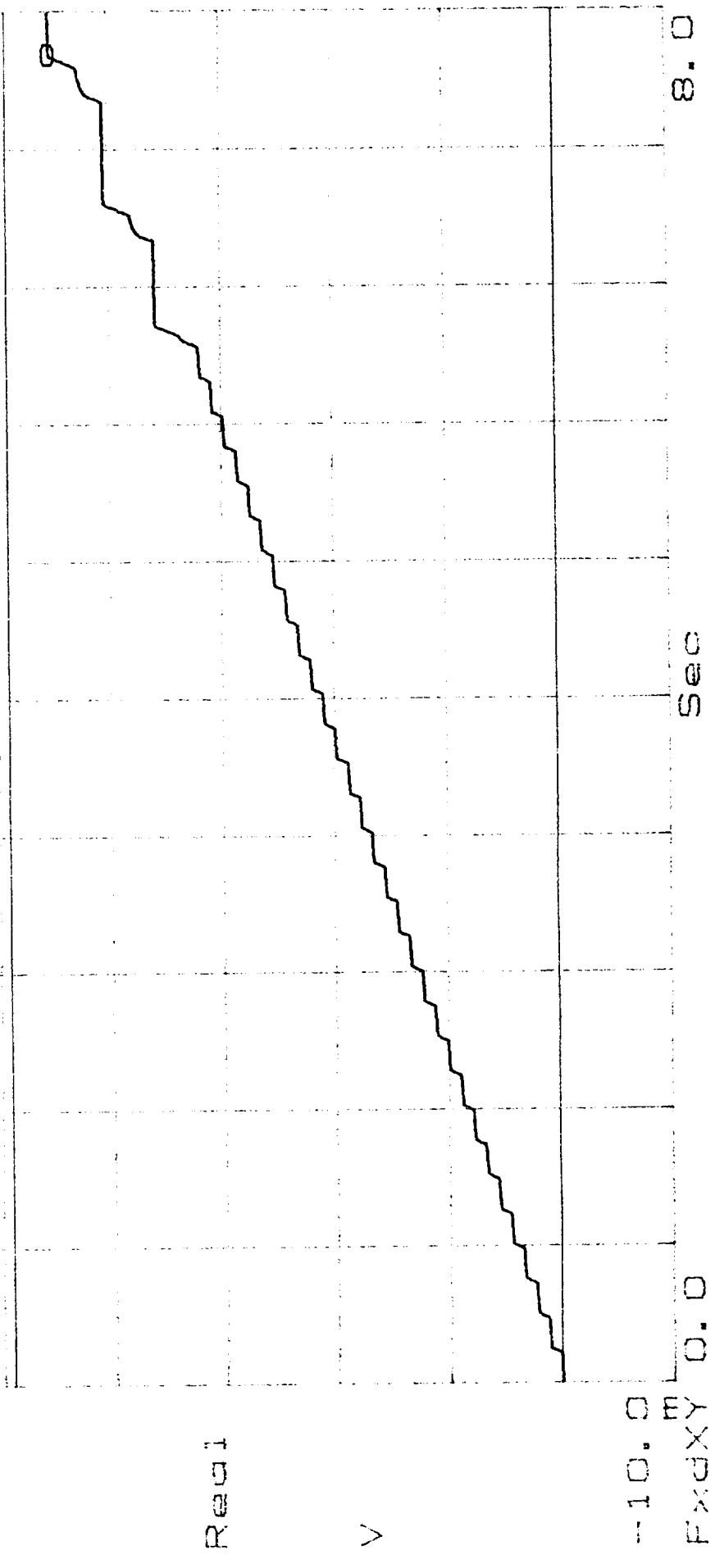
27.01V

R. Hail

Y=-12.124  $\mu$   $\Delta Y=49.07$  mV

X=7.7461 Sec  
Y<sub>a</sub>=45.1617 mV  
M:CAP TIM REC  
70.0 m

10.0 m  
/Div



27.01V  
P.3.3.3.2.1  
H/S/N 2027  
R. Blair  
11/16/88

**TEST DATA SHEET NO. 6**  
Noisy Power Bus Turn On Transient Test (Paragraph 3.3.3.2.2)

**+31 Volts**

Parameter	Measured/Calculated	Required	Pass/Fail
Peak Current	15.3 Amps	<11.5 Amps	<del>P</del> F*
Pulse Width	>0.1 ms	<100 ms	P
Rate of Change(slope): dI/dT	1963.4 mA/μs	<744 mA/μs	F *

**+29 Volts**

Parameter	Measured/Calculated	Required	Pass/Fail
Peak Current	15.05 Amps	<11.5 Amps	F *
Pulse Width	>0.1 ms	<100 ms	P
Rate of Change(slope): dI/dT	1927.0 mA/μs	<744 mA/μs	F *

**+27 Volts**

Parameter	Measured/Calculated	Required	Pass/Fail
Peak Current	14.21 Amps	<11.5 Amps	F *
Pulse Width	>0.1 ms	<100 ms	P
Rate of Change(slope): dI/dT	1819.5 mA/μs	<744 mA/μs	F *

this is accepted for "use as is" per FAR #102  
and CCR # 8122 - *Aug 11/10/98*

\* TAR # 3190

see attached TAR 3190 and CCR # 8122

EOS/AMSU-A1 System P/N: 1356008-1 Shop Order: 560863 S/N: 202

Circle Test: 1<sup>st</sup> CPT Final CPT Sub.CPT \_\_\_\_\_

*J. Sanford* 11-20-98  
Customer Representative Date

*R. Hail* 11/10/98  
Test Systems Engineer Date  
*Andie Shreeve* 11/10/98  
Quality Control Date



$X=16.41\mu S$      $\Delta X=7.812\mu S$      $Y=12.3636m$      $\Delta Y=766.9mV$   
 $Y_a=735.144m$      $\Delta Y_a=651.4mV$

CAP TIM BUF

800 m

113 m

/Div

Real

V

--100 m

EXDXY 0.0

TDC 6

S.O. 560863

AE 26156/9A

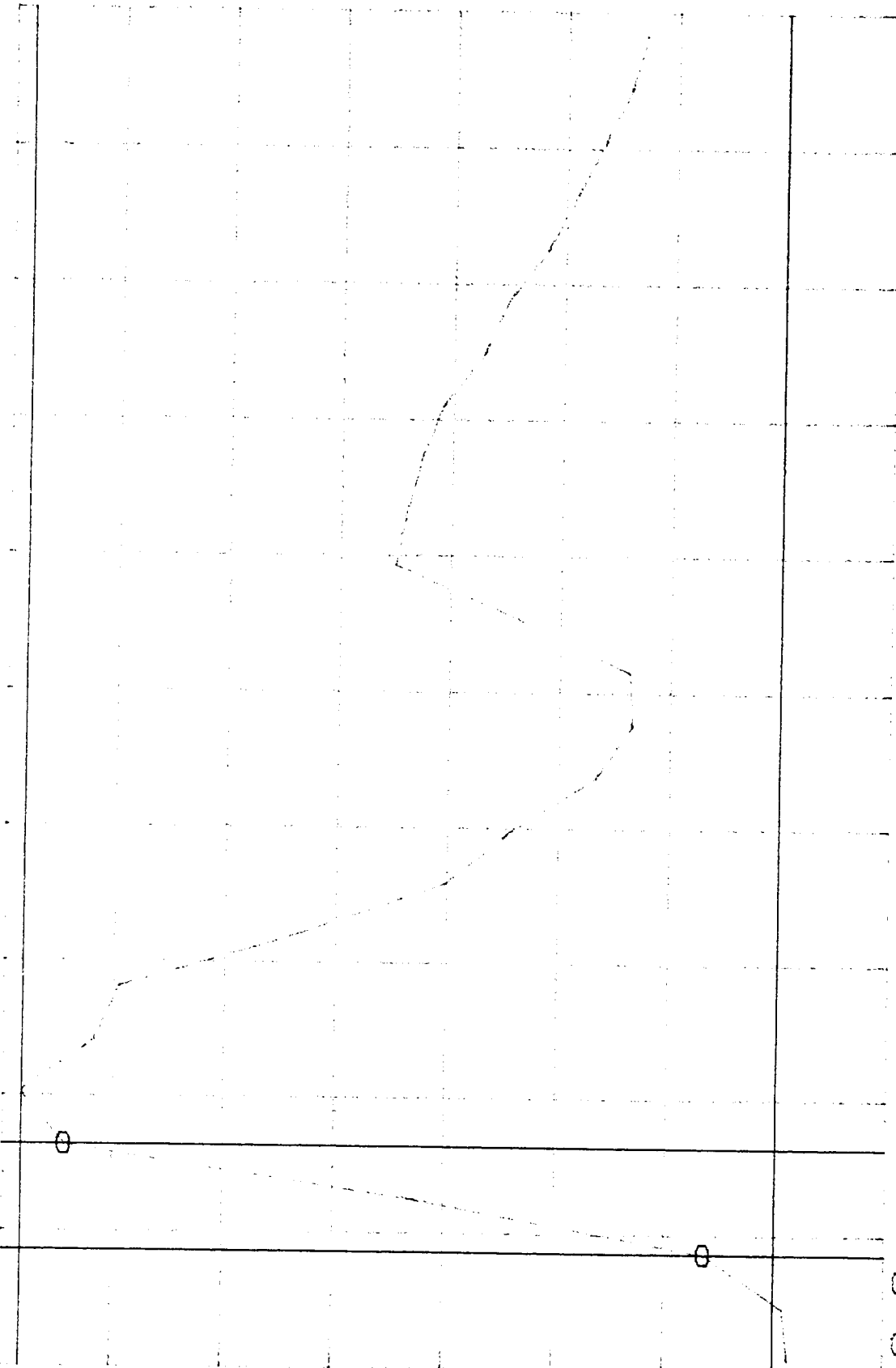
PARA: 3.3.3.2.2

Sec

TURN ON TRANSIENT  
 PEAK CURRENT &  $dv/dt$

BOSS VOLTS = 31.0V  
 T.E. R. HAIGH  
 DATE 11/7/68

100  $\mu$



X=8.594 $\mu$ S     $\Delta X=7.812\mu S$     Y=12.3636m     $\Delta Y=752.7mV$

Y<sub>a</sub>=87.0849m     $\Delta Y_a=654.2mV$

CAP TIM BUF

800

113

m

/DIV

Regul

V

100

m

FIXEDXY 0.0

Sec

100 $\mu$

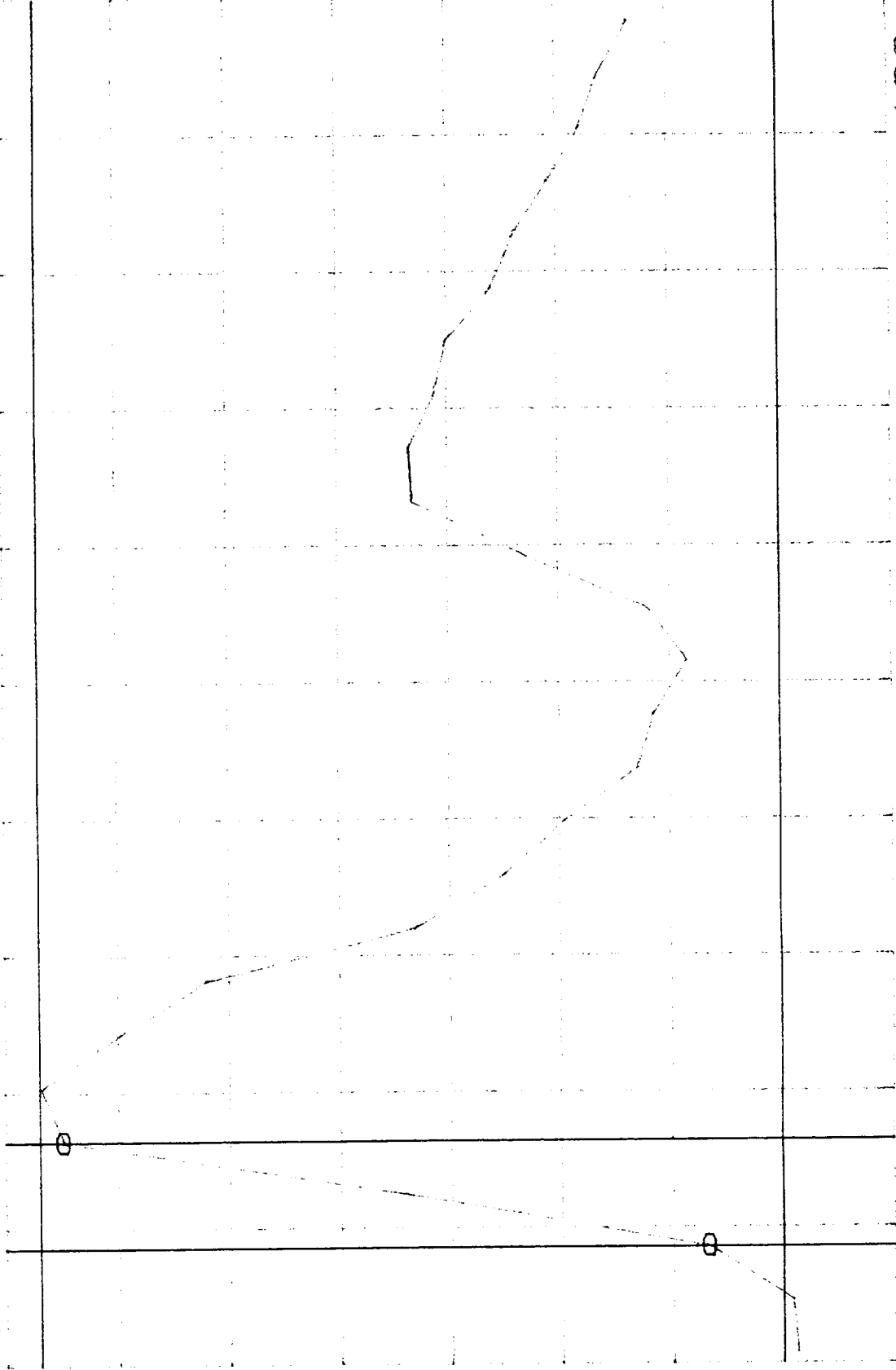
S.O. 560863

AE 26156/9A

TDC 6

TURN ON TRANSIENT  
PEAK CURRENT &  $dv/dt$

Buss Volts = 29.0 V  
T.E. R. HAIGH



$X=12.5 \mu S$   
 $Y=96.932m$   
 $\Delta X=7.812 \mu S$   
 $\Delta Y=527.4mV$   
 $Y=718.182m$   
 $\Delta Y=710.7mV$

CAP TIM BUF

800m

113m

/Div

Real

V

--100m

FxdXY 0.0

S.O. 560863

AE 26156/9A

PARA 3.3.3.2.2

TDC 6

Sec

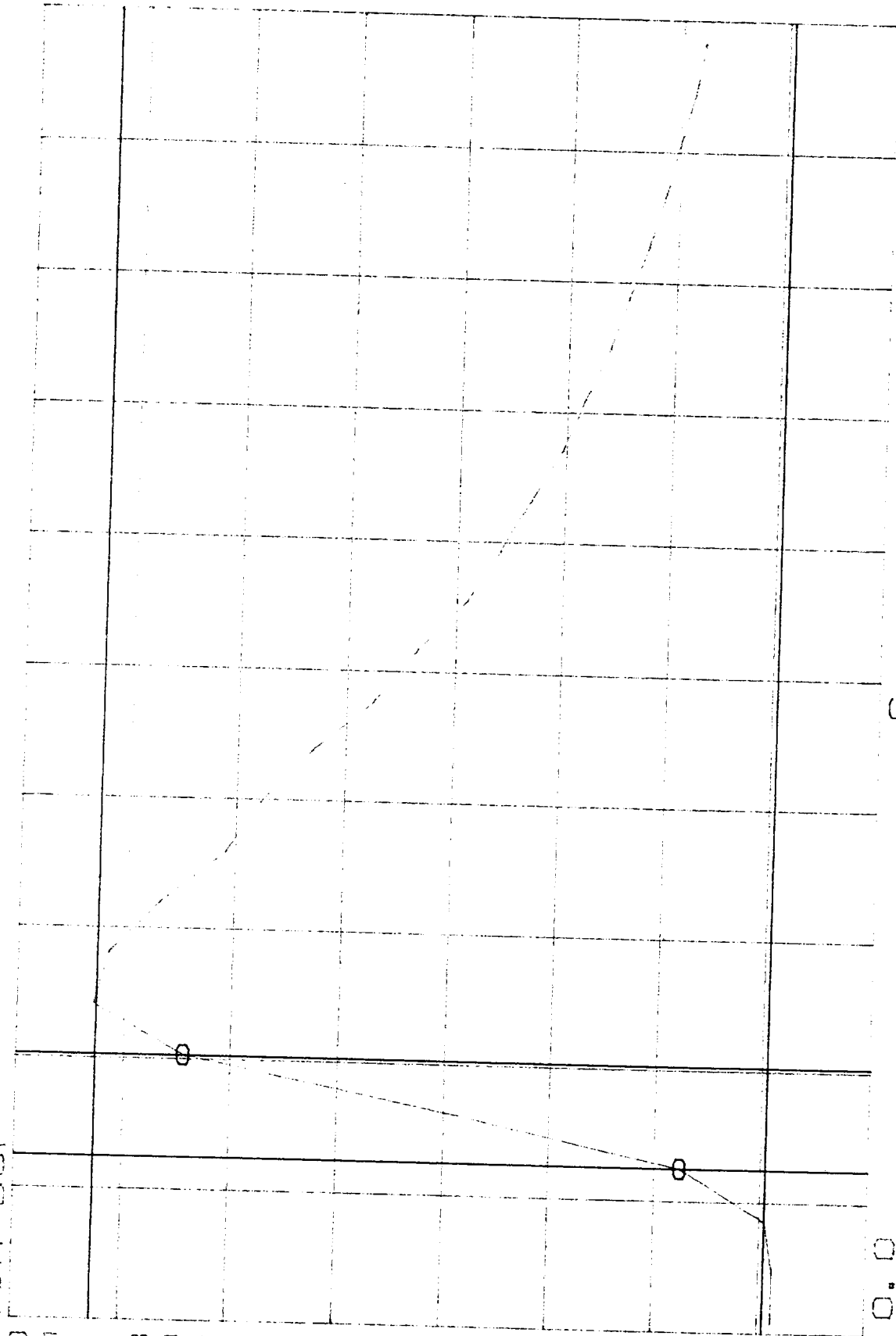
TURN ON TRANSIENT  
PEAK CURRENT  $i_{dv}/dt$

BUSS VOLTS = 27.00V

T.E. R. HAIGH

DATE 11/17/98

100μ



CAP TIM BUF

800 F

113 F

/Div

Reol

V

-100

EXDXY 0.0

Sec

80.0m

TURN ON TRANSIENT  
SETTLE TIME

Buss Volts = 31.0V  
T.E. R. HAIGH

TDC 6

S/D 560863

AE 26156/9A



CAP TIM BUF

800 F

113 E

/DIV

Reg1

V

-100

m

EXDXY 0.0

TDC 6

S.D. 560863

AE 26156/9A

PARA 3.3.3.2.2

Sec

TURN ON TRANSIENT  
SETTLE TIME

80.0m

BUSS VOLTS = 29.0 V

T.E. R. HAIGH

DATE 11/17/98

Y=718.182m  $\Delta Y=710.7mV$

X=24.219 $\mu$ Sec  
Y<sub>a</sub>=720.989mV

CAP TIM BUF  
800m

113m  
/DIV

Real

V

--100m

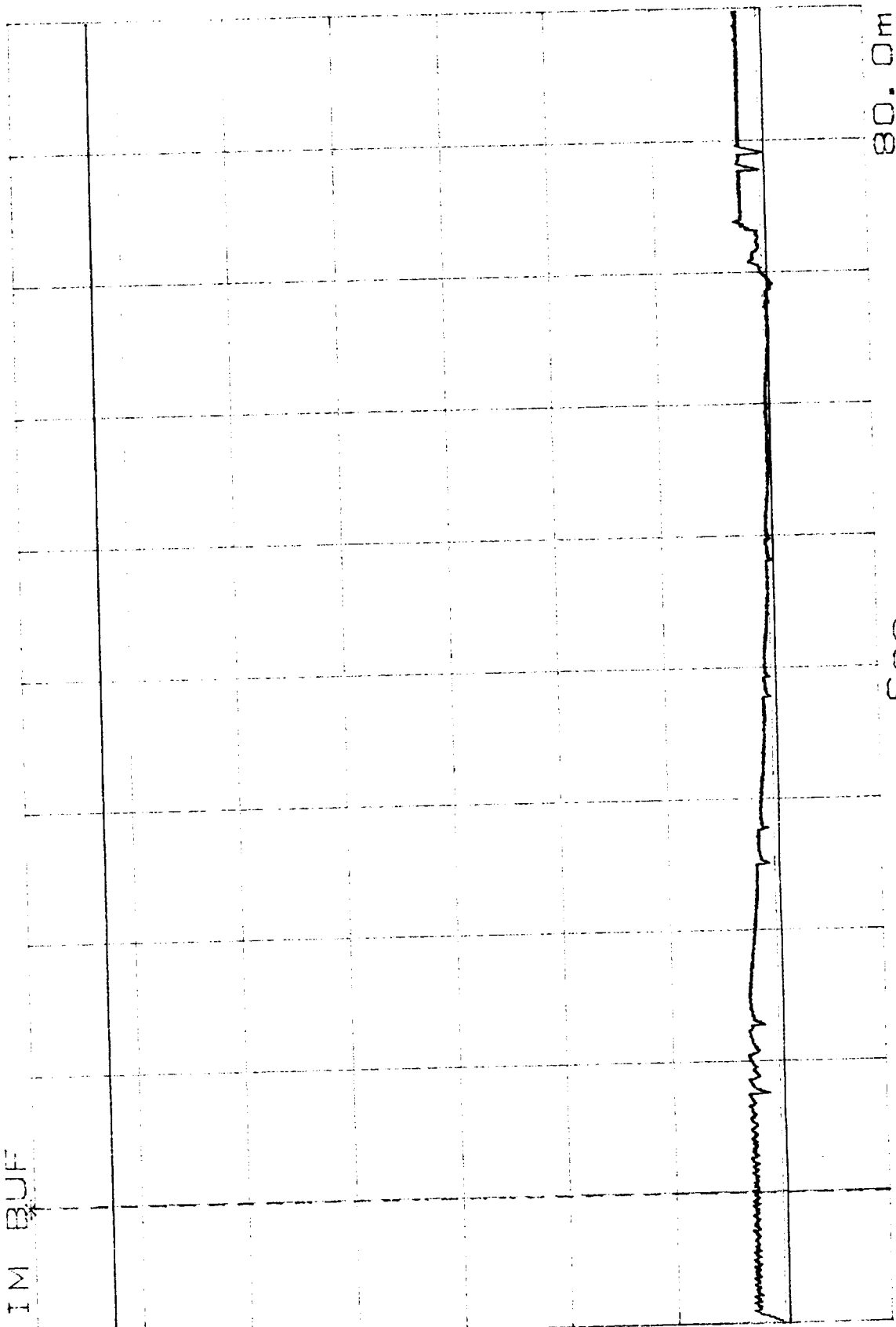
EXDXY 0.0

S/O 560863 TDC #6

AE 26156/9A

TURN ON TRANSIENT  
SETTLE TIME

BUSS VOLTS = 27.00V  
T.E. R. HAIGH



**GENCORP**  
**AEROJET**

**FAILURE / ANOMALY REPORT**  
**ELECTRONIC SYSTEMS PLANT**  
**AMSU-A MILLIMETER WAVE GROUP**

Page 1 of 1

Report Originator: <b>E. Lorenz</b>	Report Date: <b>10/29/98</b>	Site: <b>Aerojet</b>	Occurrence Date: <b>7/14/98</b>	Unit Affected: <b>EOS/AMSU-A1</b>	Unit S/N: <b>202</b>	F/AR No.: <b>102</b>
Assembly Name: <b>EOS/AMSU-A1</b>		Assembly Number: <b>1356008-1</b>		Assy. S/N: <b>202</b>	IR No.: <b>N/A</b>	TAR No.: <b>003190</b>
Subassembly Name: <b>N/A</b>		Subassembly Number: <b>N/A</b>		Subassy S/N: <b>N/A</b>	Shop Order: <b>298561</b>	Operation No.: <b>0810</b>
CCA Name: <b>N/A</b>		CCA Number: <b>N/A</b>		CCA S/N: <b>N/A</b>	MAI No.: <b>N/A</b>	Operation No.: <b>N/A</b>
Part Name: <b>N/A</b>		Part Number: <b>N/A</b>		Part S/N: <b>N/A</b>	Test Phase: <b>CPT</b>	
Test Environment: <b>Ambient</b>		Test Procedure: <b>AE-26156/9</b>		Paragraph No.: <b>3.3.3.2.2</b>		Step No.: <b>N/A</b>

## Describe Failure / Anomaly Observed:

*During CPT test, the noisy power bus peak turn on transient currents and dI/dT measurements exceeded specification (see data sheets included with the attached waiver).*

Test stopped	<b>No</b>	Date:	<b>N/A</b>	Failure/Analysis Strategy developed:	<b>N/A</b>	Date:	<b>N/A</b>
Customer Notified:	<b>Yes</b>	Verbal date:	<b>7/14/98</b>	Written date:	<b>7/21/98</b>		

## Analysis/Results:

*The subject anomaly is similar to that experienced on EOS/AMSU-A2, S/N 202 (F/AR 071). In that case, the FRB determined that the test anomaly was the result of wrong specifications. The existing specification limits had been carried over from FEI and KLM.. The data sheets were sent to NASA for examination and it was decided a waiver should be submitted. Approval of the waiver will allow closure of both F/AR 071 and the subject F/AR. The instruments will be acceptable for "use as is".*

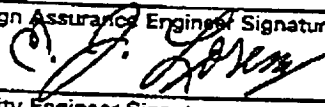
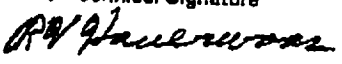


Part Generic No.: <b>N/A</b>	Part DLC: <b>N/A</b>	Vendor Name: <b>N/A</b>	Part Failure Analysis Required: <b>N/A</b>
Failure Analysis Lab: <b>N/A</b>	Lab Report No.: <b>N/A</b>	Report Date: <b>N/A</b>	See F/AR No.: <b>N/A</b>

## Corrective Action:

*A waiver (see attached POES Configuration Change Request No. 8122) was submitted and approved which accepted the increased turn-on transient levels experienced during CPT of the EOS/AMSU-A1 and A2 Instruments.*

## Action Taken To Prevent Failure/Anomaly Recurrence:

N/A

Effectivity:	<b>N/A</b>			Safety issue of Hardware:	<b>N/A</b>
Design Assurance Engineer Signature 	Date <b>10/29/98</b>	PMO / Technical Signature 	Date <b>10/29/98</b>		
Quality Engineer Signature 	Date <b>10/29/98</b>	Customer Representative Signature 	Date <b>11/20/98</b>		



TAR NO. 003190

TEST ANOMALY RECORD

SYSTEM NO. EOS AMSU-A1

DATE 7/14/98 Page 1 of

SPEC (MPI, AE, ...) AE26156/9 REV

CUMULATIVE TIME — hrs — min

ELAPSED TIME — hrs — min

ASSY NAME EOS AMSU-A2

ASSY P/N 1356008 REV H

ASSY S/N 202

S/O NO. 298561

TEST OPER NO. 0810 STEP B

(REF. MPI 00-005)

First time for failure at this point? YES ☒ NO ☐

Type of test (EXP: T/C 1 FFT HOT) CPT

Test Proc Para No. where failure occurred AE26156/9

Para Step No. 3.3.3.2.2

DESCRIPTION OF ANOMALY (LIST EXPECTED AND RECORDED VALUES):

Peak TURN ON TRANSIENT Curr  
is higher than the procedure Limit. Refer to attached data  
and requirements. This minor spec. deviation  
similar to AMSU-A2/EOS.



TECH/TE NOTIFIED TEAM LEADER NAME P.K. PATEL

DEFECT CODE

DT

TECH

DATE 7/14/98

## INSTRUCTIONS:

OPER. STATION

6000 TEST

Test to notify inspection of failure/anomaly. (Except engineering, MPI or Pretest.)

3005 INSP

Inspection to notify DCMC of failure / anomaly. (GFE)

PROD

7/14/98

IN

7/14/98

NOTIFIED done

BOB BROWN

## TROUBLESHOOT/REWORK/RETEST ACTION PLAN:

① Submit the data to NASA, S. Krimchansky  
for review and waiver.

② In parallel with submitting data  
continue with the test.

NOTE: Remove pink copy here. Deliver to QA drop box.

TE

QE

RE

DATE

TEAM LEADER

7/14/98

## TROUBLESHOOT/REWORK/RETEST/INSTRUCTIONS:

OPER. STATION

PROD

INSP

RI

PER S. Krimchansky place  
this out of spec condition on  
waiver.

#waiver # W002

P.K. Patel  
7/16/98

NOTE: For parts replacement continuation page is MANDATORY

PASSED  
Retest/Start  
Ech DATE

FAILED  
Retest/Start  
TECH DATE

GO TO S/O CONT., OR  
OPERATION 810

PAGE 29

TECH  
7/16/98

WHAT WAS THE CAUSE OF THE ANOMALY?

EMI Filter  
characteristics.

CORRECTIVE ACTION:

waiver # W002.

QE

7/16/98

DATE

TEAM LEAD

Deliver completed yellow copy to QA drop box; Completed original to parent S/O



**TEST DATA SHEET NO. 6**  
Noisy Power Bus Turn On Transient Test (Paragraph 3.3.3.2.2)

**+31 Volts**

Parameter	Measured/Calculated	Required	Pass/Fail
Peak Current	16.2 Amps	<11.5 Amps	F *
Pulse Width	0.1 ms	<100 ms	P
Rate of Change(slope): dI/dT	1856 ma/μs	<744 mA/μs	F *

**+29 Volts**

Parameter	Measured/Calculated	Required	Pass/Fail
Peak Current	15.2 Amps	<11.5 Amps	F *
Pulse Width	0.1 ms	<100 ms	P
Rate of Change(slope): dI/dT	1158 ma/μs	<744 mA/μs	F *

**+27 Volts**

Parameter	Measured/Calculated	Required	Pass/Fail
Peak Current	14.2 Amps	<11.5 Amps	F *
Pulse Width	0.1 ms	<100 ms	P
Rate of Change(slope): dI/dT	1710 ma/μs	<744 mA/μs	F *

TAR # 3190

EOS/AMSU-A1 P/N 1356008-1-1T SN: 202

S/O: 298561

Circle Test 1<sup>st</sup> CPT Final CPT Sub CPT N/A

Tom Higgins 7/14/98  
Test Systems Engineer

Customer Representative

Failed  
Quality Control

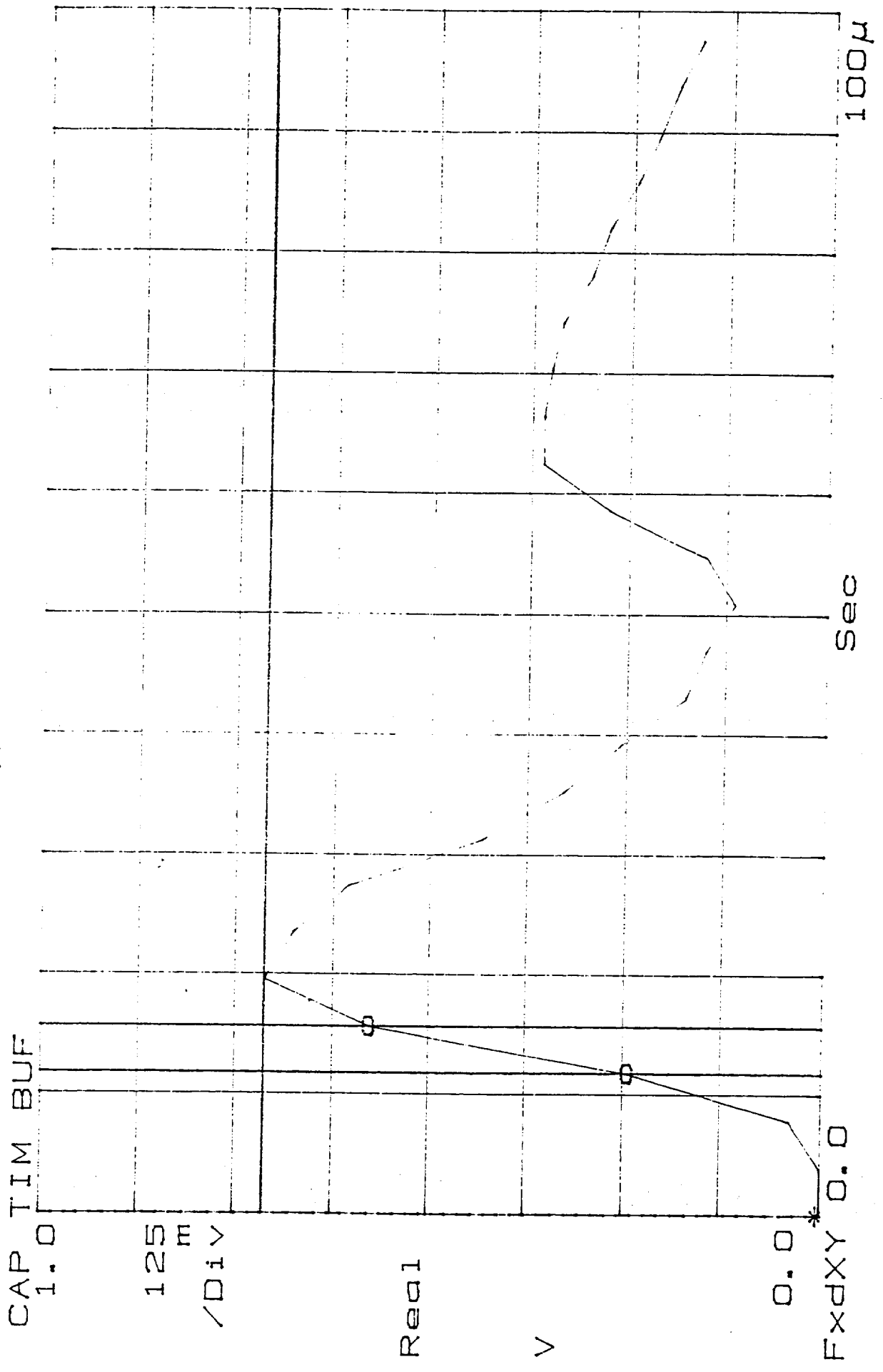




X=15.62  $\mu$ S  
 Y=576.36m  
 CAP TIM BUF  
 1.0  
 125m  
 /Div  
 Real  
 V  
 0.0  
 FxdY 0.0  
 \*

ΔX=3.906  $\mu$ S  
 ΔY=933.6mV

Y=712.121mV



X=0.0 S ΔX=19.53μS  
Yc=615.441μ ΔYc=712.1mV

CAP TIM BUF

1.0

125

m

/DIV

0

Real

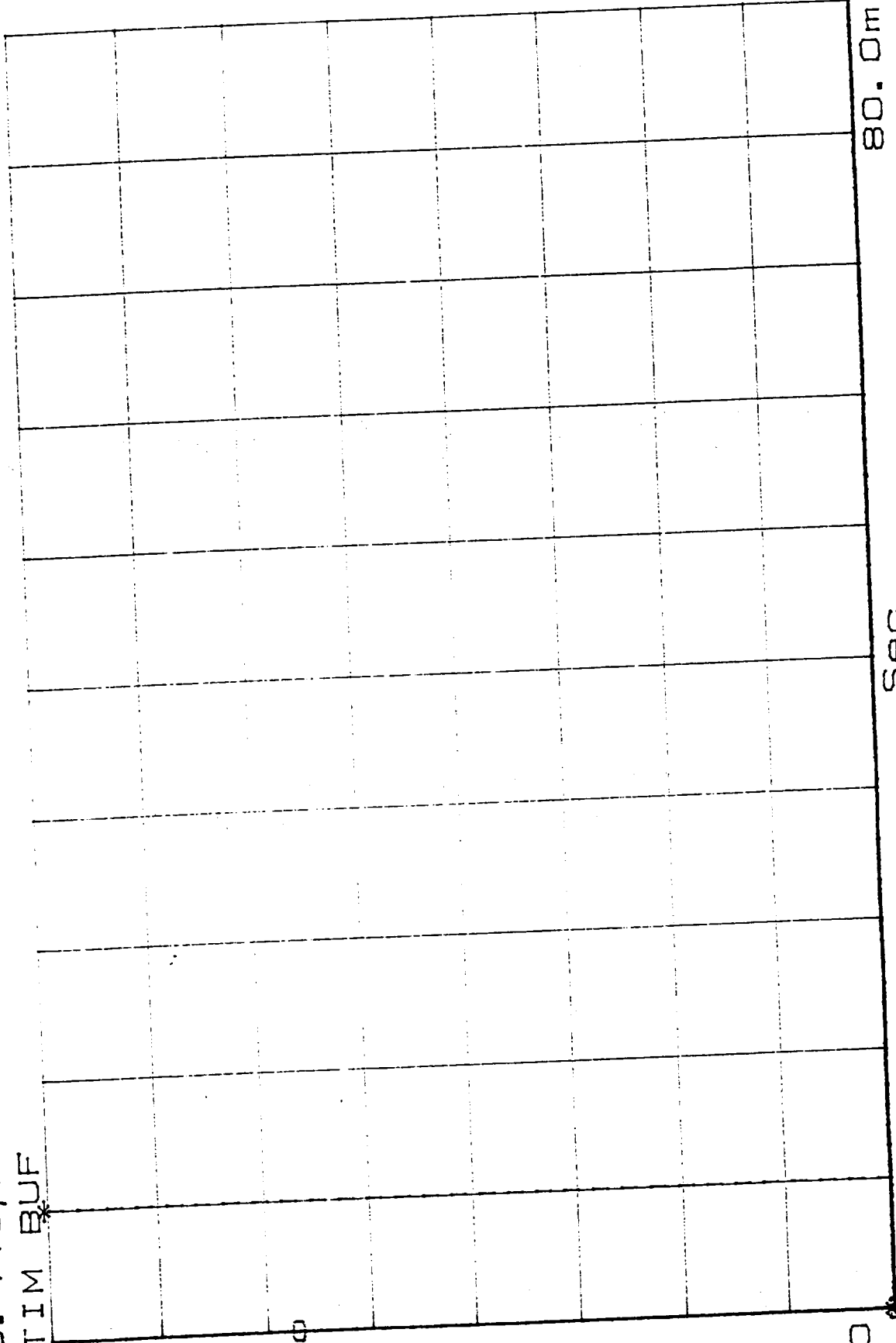
V

0.0

ExdY 0.0

Sec

80.0m



$X=11.72\mu S$      $\Delta X=3.906\mu S$      $Y=763.03mV$   
 $Y_0=137.243m$      $\Delta Y_0=225.9mV$

CAP TIM BUF

1.0

125

m

/Div

Real

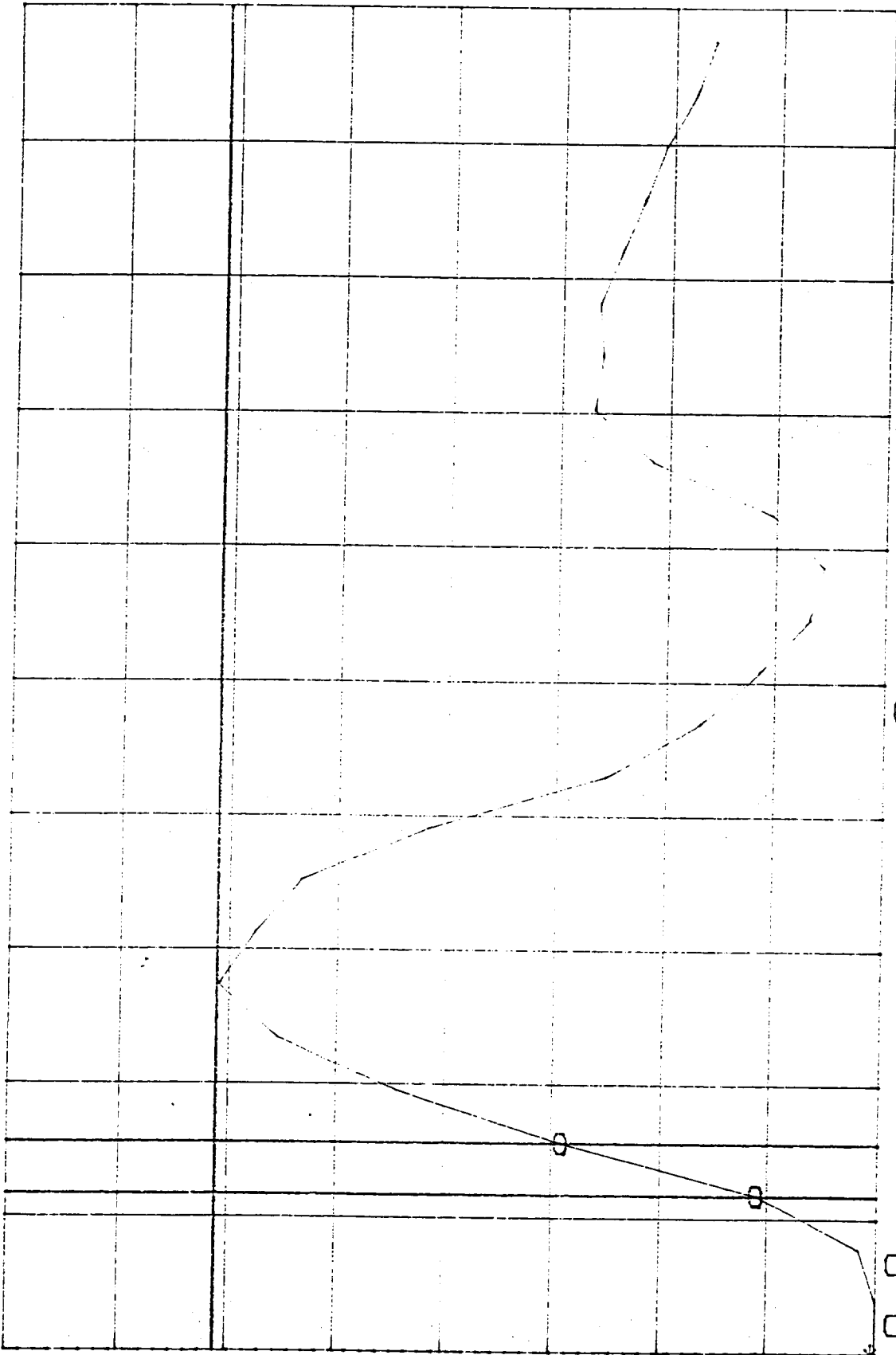
V

0.0

FxdY 0.0

Sec

100μ



Y=763.03mV

X=0.0 S AX=27.34  $\mu$ S  
Y=923.161  $\mu$  AY=761.0mV

CAP TIM BUF

1.0

125  
m

/Div

Real

V

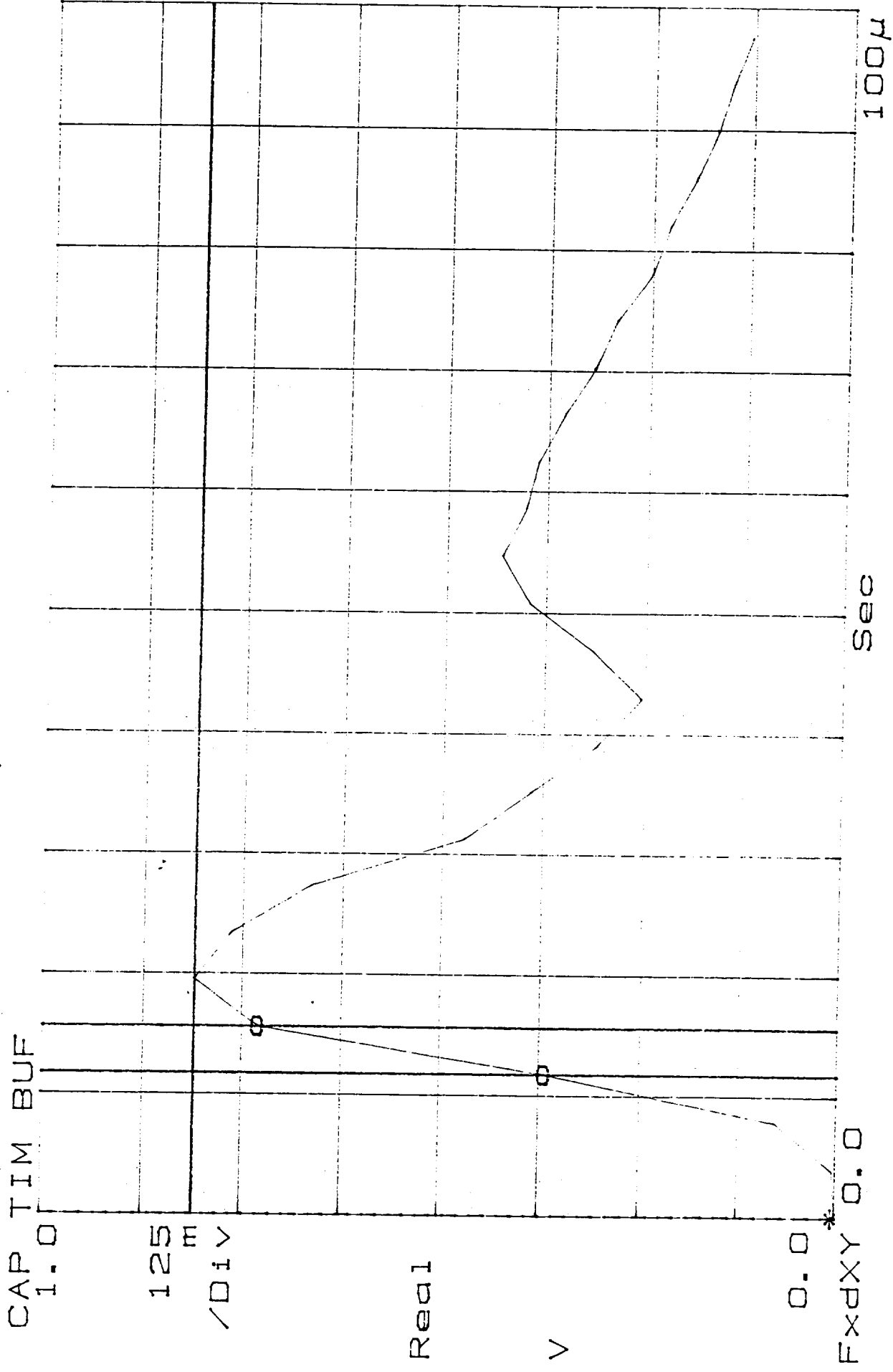
0.0

EXDXY 0.0

Sec

80.0m

X=15.62 $\mu$ S  
 Y=729.297m  
 CAP TIM BUF  
 1.0  
 125m  
 /DIV  
 AX=3.906 $\mu$ S  
 AY=361.9mV  
 Y=810.303mV



$\Delta Y = 1.212 \text{ mV}$

$Y = 0.0$

$X = 386.72 \mu\text{sec}$   
 $Y_0 = 923.161 \mu\text{V}$

CAP TIME BASE  
1.0

1005

IN

DEV

Regi

V

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

80.0m

Sec

DATE: August 11, 1998

TO: POES PROJECT CCB MEMBERS/REVIEWERS

FROM: POES PROJECT CONFIGURATION MANAGEMENT OFFICE

SUBJECT: POES PROJECT REVIEW SHEET FOR CCR A122

COGNIZANT ENGINEER: S. KRIMCHANSKY

CCR TITLE: EOS A1 AND A2 TURN ON TRANSIENTS WAIVER

RESPONSES ARE REQUIRED BY: AUGUST 18, 1998

Review the attached CCR. Indicate your recommendation for approval, approval with changes, or disapproval.

Return this form and CCR to the CM office by the above due date. If you cannot respond by the due date, notify the CM office of your anticipated date of completion. After all responses are received, the cognizant engineer will review and consolidate the responses. Once the responses have been reconciled, the CCR will be submitted to the designated approving signator or a CCB meeting will be scheduled for CCB chairperson disposition.

RECOMMENDATIONS:

APPROVE ☒

APPROVE WITH CHANGES ☐

DISAPPROVE ☐

COMMENTS/CHANGES \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

SIGNATURE: Mark Dorn DATE 10-20-98

REVIEWERS: This CCR is being routed to all reviewers at the same time.

X	DEPUTY PROJECT MANAGER/A. AZARBAZAIN	X	FINANCIAL MANAGER/J. LIU
	OBSERVATORY MANAGER/H. TASEVOLI	X	DATA OPERATIONS MGR/K. HALTERMAN
X	SYSTEMS MANAGER/D. COOLIDGE	X	SCHEDULE MANAGER/W. MAJEROWICZ
X	FLIGHT ASSURANCE MANAGER/W. DANAY		RESOURCE ANALYST/R. MCCASKILL
	INSTRUMENT SYSTEMS MGR/H. BRUMFIELD		RESOURCE ANALYST/H. RICH
X	INSTRUMENT SYSTEMS MGR/D. CROSBY	X	ELECTRICAL SYSTEMS MGR/W. JENKINS
X	DEPUTY PROJECT MANAGER RESOURCES/ D. PENNINGTON	X	NOAA/J. DANIEL/P. GREEN/P. KIM/D. FLORIAN/J. PARKER
X	CONTRACT MANAGER/J. BANISZEWSKI	X	NSI/A. ARMAN
	CONTRACT OFFICER/G. STEWART		METOP IET MANAGER/R. ALEMAN
	CONTRACT OFFICER/C. WALKER	X	EOS
X	CONTRACT SPECIALIST/K. SEXTON		
	CONTRACT OFFICER/S. MARSHALL		





GSFC 422-12-12-02

## CHANGE RECORD PAGE

DOCUMENT TITLE: Unique Instrument Interface Document (UIID)  
for the EOS Advanced Microwave Sounding Unit (AMSU-A)  
Instrument, EOS PM Project

DOCUMENT DATE: June 1993

ISSUE	DATE	PAGES AFFECTED	DESCRIPTION
Initial Release	4/16/91	All	Initial Release (Doc. Number 422-25-05) for Phase C/D RFP for AMSU-A
Original	6/93	All	This Release (Doc. Number 422-12-12-02) is the Baselined Contractual version and supersedes the previous version and reflects the change from the use of a GIIS (General Instrument Interface Specification) to a GIRD (General Interface Requirements Document), dated June, 1993, which will be used for the EOS common spacecraft procurement.
CH-01	1/94	iii, iv, 2-1, 5-2	CCR# 422-12-12-002
REVISION A	6/94	ALL	CCR# 422-12-12-007
CH-01	9/94	iii, iv, 5-5	CCR# 422-12-12-009
CH-02	7/96	iii, iv, vi, 5-5, and page 5-6 was added	CCR# 422-12-12-010
CH-03	11/96	iii, iv, 2-1, 3-2, 3-4, 3-5, 3-6, 3-7, 5-6	CCR# 422-12-12-011
CH-04	03/97	iii, iv, 3-2, 3-5, 5-7	CCR# 422-12-12-012
CH-05	11/97	iii, iv, vi, 5-7, 5-8	CCR# 422-12-12-013
CH-06	03/98	iii, iv, 5-2	CCR# 422-12-12-014
CH-07	10/98	iii, iv, vi, 5-7 5-8	CCR# 422-12-12-015
CH-08	10/98	iii, iv, 5-9	CCR# 422-12-12-019
CH-09	10/98	iii, iv, 5-9	CCR# 422-12-12-020

ZSS 420-06-05 (4/92)

REVISION A

iii

JUNE 1994

EOS PM Project  
RELEASE DATE: June 1993

93  
LIST OF AFFECTED PAGES

[illegible]

205 420-CH-94 (4/92)

REVISION A

iv

**JUNE 1994**

GSFC 422-12-12-02

32. The instrument shall meet the EMC/EMI requirments defined in 10.11.1 through 10.11.8 (GIRD para 10.11)/The AMSU-A2 instrument EMC/EMI charecteristics for CE03, RE02, RE01 are as identified in the attachments to POES Project CCR# 8120 (Waiver)./ Ref. CCR#422-12-12-019 CH
33. For turn on, the transient current shall not exceed 100% of the maximum steady state current and shall not be greater than 50 msec duration (GIRD para. 5.2.5.2.1) / AMSU-A1 and AMSU-A2 turn on transients will be as described in the attachments to POES Project CCR# 8122 (waiver). / Ref. CCR# 422-12-12-020 CH

REVISION A

5-9

JUNE 1994



**TEST DATA SHEET NO. 7**  
Passive Analog Interface Test (Paragraph 3.3.4)

Number	Thermistor	Required Temperature (Celsius)	Measured Temperature (Celsius)	Pass/Fail
1	A1-1 SCAN MOTOR	<u>25</u> * $\pm 5^{\circ}$	21.74	P
2	A1-2 SCAN MOTOR	<u>25</u> * $\pm 5^{\circ}$	26.08	
3	A1-1 RF SHELF # 1	<u>25</u> * $\pm 5^{\circ}$	22.13	
4	A1-2 RF SHELF # 1	<u>25</u> * $\pm 5^{\circ}$	23.78	
5	A1-1 WARM LOAD	<u>25</u> * $\pm 5^{\circ}$	28.79	
6	A1-2 WARM LOAD	<u>25</u> * $\pm 5^{\circ}$	23.66	
7	A1-1 RF SHELF # 2	<u>25</u> * $\pm 5^{\circ}$	25.96	
8	A1-2 RF SHELF # 2	<u>25</u> * $\pm 5^{\circ}$	28.52	

\* is the measured temperature of the unit environment

EOS/AMSU-A1 System P/N 1356008  
Circle Test: 1<sup>st</sup> CPT Final CPT

Shop Order: 560863 S/N: 202  
Sub CPT \_\_\_\_\_ LPT \_\_\_\_\_

[Signature] 11-26-98  
Customer Representative Date

[Signature] 11/14/98  
Test Systems Engineer <sup>7A</sup> 200 Date  
Quality Control NOV 19 1998 Date



EOS A1-03 E1.EXE:40 FULL SCAN MODE P1 17-NOV-98 09:12:19 SCAN NUMBER 658  
 [ 5 ] SCIENCE DATA ELEMENT 0000

[ 6 ] CONTROL/STATUS ELEMENT 00

[ 7 ] ENGINEERING ELEMENT 00

NO	UNPOWERED THERMISTORS DATA	TEMP C
1	A1-1 SCAN MOTOR TEMPERATURE	21.74
2	A1-1 RF SHELF TEMPERATURE	26.08
3	A1-1 WARM LOAD TEMPERATURE #1	22.13
4	A1-2 SCAN MOTOR TEMPERATURE	23.78
5	A1-2 RF SHELF TEMPERATURE #1	28.79
6	A1-2 WARM LOAD TEMPERATURE	23.66
7	A1-1 RF SHELF TEMPERATURE #2	25.96
8	A1-2 RF SHELF TEMPERATURE #2	28.52

ENGR OK POWER ON CHECKSUM IN 9281 CALC 9281 SA28 27 SA29 42  
 SELECT BUTTON 2 SCREEN ONLY [ 2 ] PRINT [ 3 ] FULL [ 1 ] RETURN

*P.3.3.4*  
*A1 SW 202*  
*R. Heif*  
*11/17/98*  
*TDS7*





**TEST DATA SHEET NO. 8**  
Instrument Commanding Test (Paragraph 3.3.5.2)

Step	Instrument Status	(Y)es / (N)o
12	Full Scan Mode command received?	yes
13	Is A1-1 motor scanning?	yes
14	Did A1-1 motor stop scanning?	yes
15	Is A1-2 motor scanning?	yes
16	Did A1-2 motor stop scanning?	yes
17	Are both motors scanning?	yes
18	Reflectors positioned looking at warm loads?	yes
19	Reflectors positioned looking at nadir?	yes
20	Reflectors positioned looking at cold cal 1?	yes
21	Reflectors positioned looking at cold cal 4?	yes
22	Reflectors positioned looking at cold cal 3?	yes
23	Reflectors positioned looking at cold cal 2?	yes
24	Reflectors positioned looking at cold cal 1?	yes
25	Did PLO toggle?	yes
25	Did C&DH processor reset?	yes

Yes = Pass No = Fail

EOS/AMSU-A1 System P/N 1356008  
Circle Test: 1<sup>st</sup> CPT Final CPT

open. 0580

Shop Order: 560863 S/N: 202  
Sub CPT N/A LPT N/A

J. Sanford 11-20-98  
Customer Representative Date

AMSU  
4  
SET

Roger Khanna 13 NOV. 98  
Test Systems Engineer Date  
Quality Control Date



TEST DATA SHEET NO. 21 (Sheet 1 of 2)  
Radiometer Functional Performance Test (Relative NEAT Measurements\*) (Paragraph 3.3.7.2)  
PLO #1 Turned On

RELATIVE NEAT MEASUREMENTS (PLO #1 ACTIVE)			
Channel Number	Average NEAT for 5 Data Sets (K)	Required** NEAT (K)	Pass/Fail
3	0.245	0.40	P
4	0.162	0.25	
5	0.176	0.25	
6	0.165	0.25	
7	0.136	0.25	
8	0.164	0.25	
9	0.161	0.25	
10	0.208	0.40	
11	0.245	0.40	
12	0.357	0.60	
13	0.488	0.80	
14	0.812	1.20	
15	0.121	0.50	P

P = Pass F = Fail

\* Baseline data for acceptance tests. Use 1<sup>st</sup> CPT data along with specification value for pass/fail criteria.

\*\* For reference only

oper. 0580

EOS/AMSU-A1 System P/N 1356008 Shop Order: 560863 S/N: 202  
Circle Test: 1<sup>st</sup> CPT Final CPT Sub CPT N/A LPT N/A

[Signature] 11-20-98  
Customer Representative Date

R. Khoury 11-13-98  
Test Systems Engineer Date  
Quality Control (200) NOV 19 1998 Date

**TEST DATA SHEET NO. 21 (Sheet 2 of 2)**  
Radiometer Functional Performance Test (Relative NEAT Measurements\*) (Paragraph 3.3.7.2)  
PLO #2 Turned On

RELATIVE NEAT MEASUREMENTS (PLO #2 ACTIVE)			
Channel Number	Average NEAT for 5 Data Sets (K)	Required** NEAT (K)	Pass/Fail
9	0.154	0.25	Pass ↓
10	0.219	0.40	
11	0.244	0.40	
12	0.346	0.60	
13	0.478	0.80	
14	0.826	1.20	Pass

P = Pass F = Fail

\* Baseline data for acceptance tests. Use 1<sup>st</sup> CPT data along with specification value for pass/fail criteria.

\*\* For reference only

EOS/AMSU-A1 System P/N 1356008  
Circle Test: 1<sup>st</sup> CPT Final CPT

Shop Order: 560863 SN: 202  
Sub CPT N/A

LPT N/A

R. Khoury  
Test Systems Engineer



11-13-98



NOV 19 1998

J. Sanford 11-20-98  
Customer Representative Date

Quality Control

Date

A1 FUNCTIONAL TEST RESULTS  
E1.EXE;40 13-NOV-98

09:16:04

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T
3	296.36	15985.0	15947.0	1.000	2.639
4	296.36	16664.0	16622.0	1.000	2.096
5	296.36	15964.0	15924.0	1.000	2.314
6	294.81	17283.0	14278.0	0.071	0.165 ← CH. 6
7	294.81	15696.0	12671.0	0.071	0.140 ← 7
8	296.36	16786.0	16743.0	1.000	2.098
9	294.81	16487.0	13684.0	0.077	0.146 ← 9
10	294.81	16755.0	13735.0	0.071	0.218 ← 10
11	294.81	18211.0	14882.0	0.065	0.244 ← 11
12	294.81	18371.0	15003.0	0.064	0.315 ← 12
13	294.81	18375.0	15054.0	0.065	0.499 ← 13
14	294.81	20211.0	16458.0	0.057	0.733 ← 14
15	294.81	16646.0	14704.0	0.111	0.120 ← 15

[ 2 ] PRINT SCREEN

[ 3 ] PRINT RAW DATA


[ 4 ] PRINT HISTOGRAM

[ 5 ] PRINT DISTRIBUTION GRAPH  
SELECT BUTTON 2

RETURN [ 1 ]

A1-1 channels  
Plo #1 Active  
Run #1

Final CPT - EOS- AMSU-A1 s/n 202  
s/o 560863 oper. 0580  
Support TDS 21 of AE-2615619

  
R. Wherry  
11-13-98

A1-1 Channels  
 PLO#1 Active  
 Run #2

A1 FUNCTIONAL TEST RESULTS  
 13-NOV-98  
 E1.EXE;40

09:17:57

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T
3	296.42	15984.0	15948.0	1.000	3.207
4	296.42	16662.0	16621.0	1.000	2.958
5	296.42	15959.0	15919.0	1.000	2.390
6	294.82	17280.0	14286.0	0.072	0.174 ← 6
7	294.82	15692.0	12680.0	0.071	0.126 ← 7
8	296.42	16781.0	16738.0	1.000	2.240
9	294.82	16485.0	13691.0	0.077	0.173 ← 9
10	294.82	16752.0	13741.0	0.071	0.184 ← 10
11	294.82	18200.0	14883.0	0.065	0.257 ← 11
12	294.82	18358.0	15002.0	0.064	0.375 ← 12
13	294.82	18360.0	15052.0	0.065	0.483 ← 13
14	294.82	20194.0	16459.0	0.058	0.809 ← 14
15	294.82	16642.0	14710.0	0.111	0.119 ← 15

[ 4 ] PRINT HISTOGRAM

[ 2 ] PRINT SCREEN [ 3 ] PRINT RAW DATA

RETURN [ 1 ]

[ 5 ] PRINT DISTRIBUTION GRAPH  
 SELECT BUTTON 2

A1 FUNCTIONAL TEST RESULTS  
 EL EXE;40 13-NOV-98

09:19:49

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T
3	296.48	15985.0	15948.0	1.000	2.936
4	296.48	16661.0	16613.0	1.000	2.138
5	296.48	15965.0	15933.0	1.000	8.963
6	294.82	17276.0	14294.0	0.072	0.172
7	294.82	15689.0	12691.0	0.072	0.132
8	296.48	16776.0	16732.0	1.000	2.136
9	294.82	16480.0	13698.0	0.077	0.178
10	294.82	16747.0	13749.0	0.072	0.223
11	294.82	18189.0	14887.0	0.065	0.232
12	294.82	18348.0	15008.0	0.064	0.373
13	294.82	18347.0	15055.0	0.065	0.524
14	294.82	20179.0	16462.0	0.058	0.706
15	294.82	16638.0	14716.0	0.112	0.120

[ 2 ] PRINT SCREEN

[ 3 ] PRINT RAW DATA

[ 4 ] PRINT HISTOGRAM

[ 5 ] PRINT DISTRIBUTION GRAPH

RETURN [ 1 ]

A1-1 channels  
 Plo #1 Active  
 Run #3

←6  
 ←7  
 9-15

A1-1 Channels  
 PLO #1 Active  
 RUN # 4

A1 FUNCTIONAL TEST RESULTS 13-NOV-98					09:21:26	
E1.EXE;40						
CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T	
3	296.53	15985.0	15947.0	1.000	2.590	
4	296.53	16654.0	16611.0	1.000	2.120	
5	296.53	15969.0	15928.0	1.000	2.332	
6	294.83	17275.0	14300.0	0.072	0.142	
7	294.83	15686.0	12694.0	0.072	0.133	
8	296.53	16772.0	16729.0	1.000	2.175	
9	294.83	16478.0	13701.0	0.077	0.158	
10	294.83	16744.0	13752.0	0.072	0.203	
11	294.83	18180.0	14886.0	0.065	0.260	
12	294.83	18339.0	15006.0	0.064	0.367	
13	294.83	18336.0	15053.0	0.065	0.485	
14	294.83	20168.0	16461.0	0.058	0.879	
15	294.83	16635.0	14718.0	0.112	0.116	

← 6  
 ← 7  
 9-15

[ 2 ] PRINT SCREEN [ 3 ] PRINT RAW DATA [ 4 ] PRINT HISTOGRAM

RETURN [ 1 ]

[ 5 ] PRINT DISTRIBUTION GRAPH  
 SELECT BUTTON 2



A1 FUNCTIONAL TEST RESULTS  
E1.EXE;40 13-NOV-98

09:23:02

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T
3	296.58	15983.0	15943.0	1.000	3.084
4	296.58	16650.0	16604.0	1.000	2.297
5	296.58	15965.0	15926.0	1.000	2.545
6	294.83	17272.0	14302.0	0.072	0.171
7	294.83	15683.0	12698.0	0.072	0.151
8	296.58	16769.0	16725.0	1.000	2.200
9	294.83	16476.0	13705.0	0.078	0.152
10	294.83	16740.0	13754.0	0.072	0.214
11	294.83	18171.0	14886.0	0.065	0.232
12	294.83	18329.0	15006.0	0.065	0.355
13	294.83	18326.0	15052.0	0.066	0.449
14	294.83	20155.0	16454.0	0.058	0.934
15	294.83	16632.0	14720.0	0.112	0.128

6  
7  
9-15

[ 2 ] PRINT SCREEN [ 3 ] PRINT RAW DATA [ 4 ] PRINT HISTOGRAM

SELECT BUTTON 2 [ 5 ] PRINT DISTRIBUTION GRAPH

RETURN [ 1 ]

A1-1 channels  
PLO #1 Active  
Run #5

A1-1 Shelf CHANNEL  
 PLO # 2 Active  
 Run # 1

A1 FUNCTIONAL TEST RESULTS  
 13-NOV-98  
 E1.EXE;40

09:54:41

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T
3	296.99	15979.0	15936.0	1.000	3.004
4	296.99	16593.0	16543.0	1.000	2.422
5	296.99	15870.0	15816.0	1.000	3.536
6	295.10	17234.0	14328.0	0.074	0.158
7	295.10	15649.0	12735.0	0.074	0.130
8	296.99	16714.0	16666.0	1.000	2.122
9	295.10	16489.0	13773.0	0.079	0.162
10	295.10	16721.0	13801.0	0.074	0.211
11	295.10	18063.0	14868.0	0.067	0.228
12	295.10	18218.0	14987.0	0.067	0.349
13	295.10	18191.0	15015.0	0.068	0.471
14	295.10	19994.0	16403.0	0.060	0.760
15	295.10	16589.0	14735.0	0.116	0.126

CH.  
 ← 9  
 ← 10  
 ← 11  
 ← 12  
 ← 13  
 ← 14

[ 4 ] PRINT HISTOGRAM

[ 2 ] PRINT SCREEN [ 3 ] PRINT RAW DATA

RETURN [ 1 ]

[ 5 ] PRINT DISTRIBUTION GRAPH

SELECT BUTTON 2

FINAL CPT - EOS-AMSU-A1 S/N 202  
 S/O 560863 OPER. 0580  
 Support TDS 21 of AE-26/56/9

R. Khoury 11-13-98

A1 FUNCTIONAL TEST RESULTS  
E1.EXE;40 13-NOV-98

09:58:10

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T
3	297.02	15977.0	15933.0	1.000	2.972
4	297.02	16584.0	16537.0	1.000	2.387
5	297.02	15833.0	15787.0	1.000	2.394
6	295.15	17232.0	14332.0	0.074	0.177
7	295.15	15648.0	12742.0	0.074	0.139
8	297.02	16712.0	16666.0	1.000	2.080
9	295.15	16483.0	13772.0	0.079	0.149
10	295.15	16715.0	13799.0	0.074	0.225
11	295.15	18054.0	14867.0	0.068	0.258
12	295.15	18209.0	14983.0	0.067	0.332
13	295.15	18180.0	15011.0	0.068	0.486
14	295.15	19982.0	16397.0	0.060	0.923
15	295.15	16586.0	14738.0	0.116	0.158

[ 2 ] PRINT SCREEN [ 3 ] PRINT RAW DATA [ 4 ] PRINT HISTOGRAM

SELECT BUTTON 2 [ 5 ] PRINT DISTRIBUTION GRAPH

RETURN [ 1 ]

A1-1 Channels  
Plo # 2 Active  
RUN # 2

A1-1 channels  
 PLO #2 Active  
 Run #3

```

A1 FUNCTIONAL TEST RESULTS
E1. EXE;40      13-NOV-98      09:59:38
CH  WARM TEMP  WARM COUNTS  COLD COUNTS  GAIN  DELTA T
3    297.05    15977.0      15935.0    1.000  2.979
4    297.05    16588.0      16539.0    1.000  2.029
5    297.05    15829.0      15786.0    1.000  2.308
6    295.15    17230.0      14327.0    0.074  0.193
7    295.15    15646.0      12739.0    0.074  0.147
8    297.05    16712.0      16664.0    1.000  2.060
9    295.15    16480.0      13767.0    0.079  0.175
10   295.15    16714.0      13794.0    0.074  0.217
11   295.15    18051.0      14860.0    0.067  0.233
12   295.15    18205.0      14977.0    0.067  0.323
13   295.15    18175.0      15002.0    0.068  0.454
14   295.15    19977.0      16392.0    0.060  0.788
15   295.15    16586.0      14735.0    0.116  0.150

```

[ 2 ] PRINT SCREEN      [ 3 ] PRINT RAW DATA      [ 4 ] PRINT HISTOGRAM  
 [ 5 ] PRINT DISTRIBUTION GRAPH  
 SELECT BUTTON 2

RETURN [ 1 ]

A1 FUNCTIONAL TEST RESULTS  
E1.EXE;40 13-NOV-98

10:01:07

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T
3	297.09	15976.0	15935.0	1.000	2.791
4	297.09	16586.0	16536.0	1.000	2.017
5	297.09	15827.0	15781.0	1.000	2.255
6	295.16	17229.0	14331.0	0.074	0.161
7	295.16	15645.0	12744.0	0.074	0.158
8	297.09	16711.0	16663.0	1.000	2.255
9	295.16	16479.0	13770.0	0.079	0.134
10	295.16	16711.0	13797.0	0.074	0.222
11	295.16	18046.0	14862.0	0.068	0.252
12	295.16	18201.0	14979.0	0.067	0.377
13	295.16	18172.0	15005.0	0.068	0.519
14	295.16	19969.0	16390.0	0.060	0.795
15	295.16	16584.0	14738.0	0.117	0.164

9-14

[ 2 ] PRINT SCREEN [ 3 ] PRINT RAW DATA [ 4 ] PRINT HISTOGRAM

[ 5 ] PRINT DISTRIBUTION GRAPH

RETURN [ 1 ]

A1-1 channels  
Plo #2 Active  
Run #4

A1-1-Channel.  
 PLO # 2 Active  
 Run # 5

A1 FUNCTIONAL TEST RESULTS				10:02:27
E1.EXE;40				
13-NOV-98				
CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN
3	297.12	15977.0	15934.0	1.000
4	297.12	16585.0	16535.0	1.000
5	297.12	15826.0	15780.0	1.000
6	295.16	17228.0	14335.0	0.074
7	295.16	15645.0	12750.0	0.074
8	297.12	16711.0	16662.0	1.000
9	295.16	16477.0	13772.0	0.080
10	295.16	16709.0	13800.0	0.074
11	295.16	18043.0	14862.0	0.068
12	295.16	18197.0	14982.0	0.067
13	295.16	18167.0	15007.0	0.068
14	295.16	19966.0	16394.0	0.060
15	295.16	16583.0	14741.0	0.117
				DELTA T
				3.146
				2.335
				2.058
				0.158
				0.143
				2.072
				0.151
				0.222
				0.251
				0.350
				0.458
				0.863
				0.171

9-14

[ 2 ] PRINT SCREEN      [ 3 ] PRINT RAW DATA      [ 4 ] PRINT HISTOGRAM

SELECT BUTTON 2      [ 5 ] PRINT DISTRIBUTION GRAPH

RETURN [ 1 ]

A1 FUNCTIONAL TEST RESULTS  
 E1.EXE;40 13-NOV-98

10:18:28

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN
3	297.53	15968.0	13331.0	0.082
4	297.53	16560.0	13535.0	0.072
5	297.53	15753.0	12996.0	0.079
6	295.36	17221.0	17202.0	1.000
7	295.36	15631.0	15611.0	1.000
8	297.53	16693.0	13670.0	0.072
9	295.36	16435.0	16416.0	1.000
10	295.36	16671.0	16651.0	1.000
11	295.36	17969.0	17947.0	1.000
12	295.36	18126.0	18102.0	1.000
13	295.36	18086.0	18062.0	1.000
14	295.36	19874.0	19848.0	1.000
15	295.36	16567.0	16555.0	1.000

[ 2 ] PRINT SCREEN [ 3 ] PRINT RAW DATA [ 4 ] PRINT HISTOGRAM

[ 5 ] PRINT DISTRIBUTION GRAPH  
 SELECT BUTTON 2

RETURN [ 1 ]

A1-2 Channels  
 PLO #1 Active  
 RUN #1

DELTA T	CH.
0.227	← 3
0.161	← 4
0.184	← 5
2.526	
1.831	
0.167	← 8
1.932	
2.903	
3.691	
5.459	
7.435	
13.496	
1.145	

Final CPT - EOS / AMSU-A1 S/N 202  
 S/N 560863 oper. 0580  
 Support TDS 21 of AE-2615619

R. Khoury 11/13/98  
 AMSU  
 4  
 BIT

AI-2 channels  
PLO #1 Active  
RUN #2

A1 FUNCTIONAL TEST RESULTS  
13-NOV-98  
E1.EXE:40

10:22:13

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T	PRINT SCREEN	PRINT RAW DATA	[ 3 ]	[ 4 ]	PRINT HISTOGRAM
3	297.51	15966.0	13341.0	0.083	0.239					
4	297.51	16555.0	13549.0	0.072	0.163					
5	297.51	15746.0	13004.0	0.079	0.171					
6	295.44	17218.0	17199.0	1.000	2.563					
7	295.44	15629.0	15609.0	1.000	1.650					
8	297.51	16687.0	13684.0	0.072	0.158					
9	295.44	16428.0	16410.0	1.000	2.006					
10	295.44	16664.0	16644.0	1.000	2.736					
11	295.44	17954.0	17931.0	1.000	3.464					
12	295.44	18110.0	18086.0	1.000	5.163					
13	295.44	18067.0	18045.0	1.000	6.616					
14	295.44	19855.0	19825.0	1.000	11.800					
15	295.44	16564.0	16552.0	1.000	1.156					

```

[ 2 ] PRINT SCREEN
[ 3 ] PRINT RAW DATA
[ 4 ] PRINT HISTOGRAM

```

RETURN [ 1 ]

```
[ 5 ] PRINT DISTRIBUTION GRAPH
SELECT BUTTON 2
```

RETURN [ 1 ]



A1 FUNCTIONAL TEST RESULTS  
E1.EXE;40 13-NOV-98

10:24:37

A1-2 channels  
PLO #1 Active  
RUN #3

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN	DELTA T	ch.
3	297.48	15965.0	13342.0	0.083	0.240	← 3
4	297.48	16550.0	13546.0	0.072	0.164	← 4
5	297.48	15743.0	13003.0	0.079	0.183	← 5
6	295.49	17218.0	17199.0	1.000	2.463	
7	295.49	15627.0	15607.0	1.000	2.160	
8	297.48	16685.0	13683.0	0.072	0.143	← 8
9	295.49	16427.0	16408.0	1.000	1.734	
10	295.49	16661.0	16641.0	1.000	2.975	
11	295.49	17947.0	17923.0	1.000	3.706	
12	295.49	18101.0	18077.0	1.000	5.605	
13	295.49	18057.0	18032.0	1.000	7.536	
14	295.49	19842.0	19814.0	1.000	13.835	
15	295.49	16562.0	16549.0	1.000	1.303	

[ 2 ] PRINT SCREEN [ 3 ] PRINT RAW DATA [ 4 ] PRINT HISTOGRAM

SELECT BUTTON 2 [ 5 ] PRINT DISTRIBUTION GRAPH

RETURN [ 1 ]

A1-2 Channels  
 PLO #1 Active  
 RUN # 4

```

A1 FUNCTIONAL TEST RESULTS
E1.EXE;40      13-NOV-98      10:26:46
CH  WARM TEMP  WARM COUNTS  COLD COUNTS  GAIN  DELTA T  ch.
  3    297.45    15963.0     13347.0    0.083    0.259    3
  4    297.45    16553.0     13557.0    0.073    0.178    3
  5    297.45    15743.0     13008.0    0.080    0.168    3
  6    295.54    17219.0     17199.0    1.000    2.247    3
  7    295.54    15628.0     15608.0    1.000    1.890    3
  8    297.45    16681.0     13690.0    0.073    0.172    3
  9    295.54    16425.0     16406.0    1.000    2.086    3
 10    295.54    16659.0     16638.0    1.000    3.387    3
 11    295.54    17940.0     17916.0    1.000    3.833    3
 12    295.54    18096.0     18073.0    1.000    5.021    3
 13    295.54    18049.0     18026.0    1.000    6.842    3
 14    295.54    19835.0     19805.0    1.000   13.113    3
 15    295.54    16561.0     16549.0    1.000    1.065    3

[ 2 ] PRINT SCREEN      [ 3 ] PRINT RAW DATA      [ 4 ] PRINT HISTOGRAM
                                [ 5 ] PRINT DISTRIBUTION GRAPH
SELECT BUTTON 2
                                RETURN [ 1 ]

```

A1 FUNCTIONAL TEST RESULTS  
E1.EXE;40 13-NOV-98

10:28:47

CH	WARM TEMP	WARM COUNTS	COLD COUNTS	GAIN
3	297.42	15964.0	13352.0	0.083
4	297.42	16551.0	13560.0	0.073
5	297.42	15742.0	13014.0	0.080
6	295.58	17218.0	17198.0	1.000
7	295.58	15627.0	15607.0	1.000
8	297.42	16680.0	13697.0	0.073
9	295.58	16424.0	16406.0	1.000
10	295.58	16657.0	16638.0	1.000
11	295.58	17936.0	17912.0	1.000
12	295.58	18091.0	18067.0	1.000
13	295.58	18044.0	18021.0	1.000
14	295.58	19828.0	19800.0	1.000
15	295.58	16560.0	16548.0	1.000

[ 2 ] PRINT SCREEN

[ 3 ] PRINT RAW DATA

[ 4 ] PRINT HISTOGRAM

[ 5 ] PRINT DISTRIBUTION GRAPH

RETURN [ 1 ]

PL0#1 Active  
A1-2 Channels  
RUN #5

DELTA T	CH
0.258	← 3
0.145	← 4
0.172	← 5
2.404	
2.094	
0.182	← 8
2.112	
2.790	
3.308	
5.456	
7.438	
12.580	
1.464	



**TEST DATA SHEET NO. 9** (Sheet 1 of 3)  
Science and Engineering Data Test (Full Scan Mode) (Paragraph 3.3.5.3.1)

Step	Instrument Status	(Y)es / (N)o
1	Full Scan Mode command received?	yes
2	ENGR OK message seen?	yes
3	Unit (both reflectors) running in full scan mode?	yes

Yes = Pass No = Fail

Step	Element	Description	Measured Value* (Binary)	Required Value (Binary)	(P)ass/(F)ail
4a	1-2	Packet ID		0000100100000101	Pass
4b	3-4	Packet Length		0000001010111111	Pass
4c	5-6	Unit Serial Number		0000001100000000	Pass
4d	7-8	Instrument Mode/ Status		1001101000000010	Pass

RADIOMETER SCENE DATA			
Step	Description	Required Counts	(P)ass/(F)ail
4f	Review All Scene Data	12500-20500	Pass

PRT TEMPERATURE DATA				
Step	Element	Description	Required	(P)ass/(F)ail
4g	1090-1178	Review All PRT Data**	10-40 degrees C	Pass
4g	1180	Temperature Sensor Reference	23244-26317 counts	Pass

STATUS				
Step	Description	Status*	Required Status	(P)ass/(F)ail
4h	Antenna in Full Scan Mode		YES	Pass
	Antenna in Warm Cal Mode		NO	
	Antenna in Cold Cal Mode		NO	
	Antenna in Nadir Mode		NO	
	Cold Cal Position LSB		ZERO	
	Cold Cal Position MSB		ZERO	
	PLO Redundancy		PLO #1	
	Scanner A1-1 Power		ON	
	Scanner A1-2 Power		ON	
	PLO #1 Lock		YES	
	PLO #2 Lock		OFF	
	ADC Latchup Flag		ONE	Pass

\* Rewriting printout data on this data sheet is optional.

\*\* Refer to Table IV for PRT Data Description

EOS/AMSU-A1 System P/N 1256008  
Circle Test: 1<sup>st</sup> CPT (Final CPT)

Shop Order: 560863 S/N: 202  
Sub CPT N/A LPT N/A

J. Sanford 11-20-98  
Customer Representative Date

R. Khoury 13 Nov 98  
Test Systems Engineer (7A) Date  
200 NOV 19 1998  
Quality Control Date

**TEST DATA SHEET NO. 9 (Sheet 2 of 3)**  
Science and Engineering Data Test (Full Scan Mode) (Paragraph 3.3.5.3.1)

REFLECTOR POSITIONS (Step 4e)							
BP	A1-1 REFLECTOR				A1-2 REFLECTOR		
	Element	Position (*)	Required (**) ± 5	(P)ass/ (F)ail	Element	Position (*)	Required (**) ± 5 (P)ass/ (F)ail
1	14		14520	Pass	16		14168 Pass
2	48		14672		50		14320
3	82		14824		84		14472
4	116		14975		118		14623
5	150		15127		152		14775
6	184		15279		186		14927
7	218		15430		220		15078
8	252		15582		254		15230
9	286		15734		288		15382
10	320		15885		322		15533
11	354		16037		356		15685
12	388		16189		390		15837
13	422		16340		424		15988
14	456		108		458		16140
15	490		260		492		16292
16	524		411		526		59
17	558		563		560		211
18	592		715		594		363
19	626		866		628		514
20	660		1018		662		666
21	694		1170		696		818
22	728		1321		730		969
23	762		1473		764		1121
24	796		1625		798		1273
25	830		1776		832		1424
26	864		1928		866		1576
27	898		2080		900		1728
28	932		2231		934		1879
29	966		2383		968		2031
30	1000		2535		1002		2183
CC	1034		4129	Pass	1036		3727
WC	1186		8528	Pass	1188		8176 Pass

\* Actual counts from printout. Rewriting counts on this data sheet is optional.  
\*\* Required counts from AE26002/1 TDS 5&6 +/- 5 counts

EOS/AMSU-A1 System P/N 1356008  
Circle Test: 1<sup>st</sup> CPT Final CPT

Shop Order: 560863 SN: 202  
Sub CPT N/A LPT N/A

J. Sanford 11-20-98  
Customer Representative Date

0401 0580  
Roger Khoury 13 Nov. 98  
Test Systems Engineer (AMSU 4 RET) 7A Date  
200 NOV 19 1998  
Quality Control Date

TEST DATA SHEET NO. 9 (Sheet 3 of 3)  
Science and Engineering Data Test (Full Scan Mode) (Paragraph 3.3.5.3.1)

ENGINEERING DATA				
Step	Description	Measured*	Required	(P)ass/(F)ail
4i	Signal Processor (+5 VDC)		+4 to +6 volts	Pass
	Signal Processor (+15 VDC)		+14 to +16 volts	
	Signal Processor (-15 VDC)		-14 to -16 volts	
	Scan Drive (+5 VDC)		+4 to +6 volts	
	Scan Drive (+15 VDC)		+14 to +16 volts	
	Scan Drive (-15 VDC)		-14 to -16 volts	
	PLO (+15 VDC)		+14 to +16 volts	
	PLO (-15 VDC)		-14 to -16 volts	
	Receiver (+8 VDC)		+7 to +9 volts	
	Mixer/IF Amplifier A1-1 (+10 VDC)		+9 to +11 volts	
	Mixer/IF Amplifier A1-2 (+10 VDC)		+9 to +11 volts	
	LO Channel 6		+9 to +11 volts	
	LO Channel 7		+9 to +11 volts	
	LO Channel 3		+9 to +11 volts	
	LO Channel 4		+9 to +11 volts	
	LO Channel 5		+9 to +11 volts	
	LO Channel 8		+9 to +11 volts	
	LO Channel 15		+14 to +16 volts	
	Quiet Bus Current		≤ 3 Amps	
	A1-1 Noisy Bus Current		≤ 125 milliamps	Pass
	A1-2 Noisy Bus Current		≤ 125 milliamps	

\* Rewriting printout data on this data sheet is optional.

EOS/AMSU-A1 System P/N 1356008

Circle Test: 1<sup>st</sup> CPT Final CPT

Shop Order: 560863

Sub CPT N/A

S/N: 202

LPT N/A

Customer Representative

11-20-98  
Date

Test Systems Engineer

Quality Control

Date

NOV 10 1998  
Date





EOS A1-03 E1.EXE:40 FULL SCAN MODE P1 13-NOV-98 12:47:12 SCAN NUMBER 222  
 [ 5 ] SCIENCE DATA ELEMENT 0000

[ 6 ] CONTROL/STATUS ELEMENT 00

[ 7 ] ENGINEERING ELEMENT 00

# COMMANDS

[ 9 ] SCANNER A1-1 POWER = ON P1LO POWER = P1LO#1 [ 15 ]

[ 10 ] SCANNER A1-2 POWER = ON COLD CAL POSITION 1 = YES [ 16 ]

[ 11 ] ANTENNA FULL SCAN MODE = YES 2 = NO [ 17 ]

[ 12 ] WARM CAL = NO 3 = NO [ 18 ]

[ 13 ] COLD CAL = NO COLD CAL POSITION 4 = NO [ 19 ]

[ 14 ] NADIR = NO RESET C&DH PROCESSOR [ 20 ]

ENGR OK POWER ON CHECKSUM IN B5FD CALC B5FD SA28 [ 21 ]

SELECT BUTTON 3 SCREEN ONLY [ 2 ] PRINT [ 3 ] FULL 56 SA29 111

[ 1 ] RETURN

*FINAL CPT - EOS-AMSU-A1 S/W 202*

*S/O 560863 OPER. 0580*

*SUPPOT TDS 9 OF AE-26/56/9*

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	WARM CAL SAMPLE 17	CH 8
2		00000101	574		CH 9
3	PACKET LENGTH	00000010	576		CH 10
4		10111111	578		CH 11
5	UNIT SERIAL NUMBER	00000011	580		CH 12
6		00000000	582		CH 13
7	INSTRUMENT MODE/STATUS	10011010	584		CH 14
8		00000010	586		CH 15
10	REFLECTOR 1 POSITION 1	14521	588	REFLECTOR 1 POSITION 18	719
12	REFLECTOR 2 POSITION 1	14169	590	REFLECTOR 2 POSITION 18	367
14	REFL 1 POS 1 2ND LOOK	14521	592	REFL 1 POS 18 2ND LOOK	714
16	REFL 2 POS 1 2ND LOOK	14169	594	REFL 2 POS 18 2ND LOOK	362
18	WARM CAL SAMPLE 1	16088	596	WARM CAL SAMPLE 18	16082
20		16720	598		16707
22		16003	600		15995
24		17337	602		17302
26		15776	604		15747
28		16862	606		16851
30		16559	608		16534
32		16806	610		16777
34		18273	612		18237
36		18412	616		18413
38		20292	618		18392
40		16711	620		20254
42		14677	622	REFLECTOR 1 POSITION 19	16690
44	REFLECTOR 2 POSITION 2	14323	624	REFLECTOR 2 POSITION 19	873
46	REFL 1 POS 2 2ND LOOK	14671	626	REFL 1 POS 19 2ND LOOK	518
48	REFL 2 POS 2 2ND LOOK	14319	628	REFL 2 POS 19 2ND LOOK	865
50	WARM CAL SAMPLE 2	16093	630	WARM CAL SAMPLE 19	513
52		16717	632		16079
54		16004	634		16701
56		17327	636		15987
58		15767	638		17304
60		16860	640		15748
62		16554	642		16850
64		16799	644		16532
66		18266	646		16775
68		18433	648		18244
70		18418	650		18408
72		20283	652		18405
74		16705	654		20246
76	REFLECTOR 1 POSITION 3	14830	656	REFLECTOR 1 POSITION 20	16693
78	REFLECTOR 2 POSITION 3	14474	658	REFLECTOR 2 POSITION 20	1022
80	REFL 1 POS 3 2ND LOOK	14823	660	REFL 1 POS 20 2ND LOOK	669
82	REFL 2 POS 3 2ND LOOK	14470	662	REFL 2 POS 20 2ND LOOK	1017
84	WARM CAL SAMPLE 3	16160	664	WARM CAL SAMPLE 20	664
86		16812	666		16091
88		16076	668		16724
90		17324	670		16005
92					17306

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15762	672	CH 7	15746
96	CH 8	16924	674	CH 8	16867
98	CH 9	16553	676	CH 9	16532
100	CH 10	16796	678	CH 10	16772
102	CH 11	18263	680	CH 11	18238
104	CH 12	18444	682	CH 12	18406
106	CH 13	18409	684	CH 13	18400
108	CH 14	20272	686	CH 14	20238
110	CH 15	16702	688	CH 15	16690
112	REFLECTOR 1 POSITION 4	14984	690	REFLECTOR 1 POSITION 21	1177
114	REFLECTOR 2 POSITION 4	14625	692	REFLECTOR 2 POSITION 21	820
116	REFL 1 POS 4 2ND LOOK	14974	694	REFL 1 POS 21 2ND LOOK	1169
118	REFL 2 POS 4 2ND LOOK	14621	696	REFL 2 POS 21 2ND LOOK	816
120	WARM CAL SAMPLE 4	16199	698	WARM CAL SAMPLE 21	16106
122	CH 3	16876	700	CH 3	16744
124	CH 4	16119	702	CH 4	16023
126	CH 5	17333	704	CH 5	17307
128	CH 6	15773	706	CH 6	15748
130	CH 7	16967	708	CH 7	16882
132	CH 8	16557	710	CH 8	16530
134	CH 9	16801	712	CH 9	16779
136	CH 10	18265	714	CH 10	18237
138	CH 11	18443	716	CH 11	18415
140	CH 12	18430	718	CH 12	18404
142	CH 13	20292	720	CH 13	20245
144	CH 14	16702	722	CH 14	16689
146	CH 15	15134	724	CH 15	1330
148	REFLECTOR 1 POSITION 5	14776	726	REFLECTOR 1 POSITION 22	972
150	REFLECTOR 2 POSITION 5	15127	728	REFLECTOR 2 POSITION 22	1321
152	REFL 1 POS 5 2ND LOOK	14773	730	REFL 1 POS 22 2ND LOOK	967
154	REFL 2 POS 5 2ND LOOK	16097	732	REFL 2 POS 22 2ND LOOK	16124
156	WARM CAL SAMPLE 5	16732	734	WARM CAL SAMPLE 22	16766
158	CH 3	16014	736	CH 3	16047
160	CH 4	17321	738	CH 4	17309
162	CH 5	15764	740	CH 5	15746
164	CH 6	16872	742	CH 6	16891
166	CH 7	16551	744	CH 7	16530
168	CH 8	16794	746	CH 8	16782
170	CH 9	18249	748	CH 9	18246
172	CH 10	18433	750	CH 10	18420
174	CH 11	18406	752	CH 11	18380
176	CH 12	20259	754	CH 12	20234
178	CH 13	16694	756	CH 13	16691
180	CH 14	15285	758	CH 14	1479
182	CH 15	14930	760	CH 15	1122
184	REFLECTOR 1 POSITION 6	15279	762	REFLECTOR 1 POSITION 23	1473
186	REFLECTOR 2 POSITION 6	14926	764	REFLECTOR 2 POSITION 23	1119
188	REFL 1 POS 6 2ND LOOK	16079	766	REFL 1 POS 23 2ND LOOK	16084
190	REFL 2 POS 6 2ND LOOK	16705	768	REFL 2 POS 23 2ND LOOK	16723
192	WARM CAL SAMPLE 6	15990	770	WARM CAL SAMPLE 23	16008

SCIENCE DATA  
WARM CAL MODE

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17310	772	CH 6	17310
196	CH 7	15749	774	CH 7	15746
198	CH 8	16856	776	CH 8	16864
200	CH 9	16533	778	CH 9	16532
202	CH 10	16780	780	CH 10	16776
204	CH 11	18240	782	CH 11	18239
206	CH 12	18416	784	CH 12	18413
208	CH 13	18399	786	CH 13	18395
210	CH 14	20220	788	CH 14	20255
212	CH 15	16691	790	CH 15	16691
214	REFLECTOR 1 POSITION 7	15440	792	REFLECTOR 1 POSITION 24	1630
216	REFLECTOR 2 POSITION 7	15081	794	REFLECTOR 2 POSITION 24	1276
218	REFL 1 POS 7 2ND LOOK	15430	796	REFL 1 POS 24 2ND LOOK	1625
220	REFL 2 POS 7 2ND LOOK	15076	798	REFL 2 POS 24 2ND LOOK	1272
222	WARM CAL SAMPLE 7	16076	800	WARM CAL SAMPLE 24	16073
224	CH 4	16710	802	CH 4	16712
226	CH 5	15985	804	CH 5	15999
228	CH 6	17304	806	CH 6	17301
230	CH 7	15749	808	CH 7	15742
232	CH 8	16851	810	CH 8	16853
234	CH 9	16534	812	CH 9	16532
236	CH 10	16780	814	CH 10	16778
238	CH 11	18245	816	CH 11	18246
240	CH 12	18410	818	CH 12	18409
242	CH 13	18385	820	CH 13	18402
244	CH 14	20234	822	CH 14	20242
246	CH 15	16689	824	CH 15	16689
248	REFLECTOR 1 POSITION 8	15589	826	REFLECTOR 1 POSITION 25	1784
250	REFLECTOR 2 POSITION 8	15235	828	REFLECTOR 2 POSITION 25	1426
252	REFL 1 POS 8 2ND LOOK	15582	830	REFL 1 POS 25 2ND LOOK	1775
254	REFL 2 POS 8 2ND LOOK	15229	832	REFL 2 POS 25 2ND LOOK	1422
256	WARM CAL SAMPLE 8	16080	834	WARM CAL SAMPLE 25	16071
258	CH 4	16704	836	CH 4	16708
260	CH 5	15987	838	CH 5	15998
262	CH 6	17308	840	CH 6	17299
264	CH 7	15750	842	CH 7	15738
266	CH 8	16850	844	CH 8	16853
268	CH 9	16540	846	CH 9	16524
270	CH 10	16782	848	CH 10	16775
272	CH 11	18245	850	CH 11	18235
274	CH 12	18422	852	CH 12	18402
276	CH 13	18404	854	CH 13	18382
278	CH 14	20229	856	CH 14	20227
280	CH 15	16691	858	CH 15	16684
282	REFLECTOR 1 POSITION 9	15739	860	REFLECTOR 1 POSITION 26	1937
284	REFLECTOR 2 POSITION 9	15385	862	REFLECTOR 2 POSITION 26	1578
286	REFL 1 POS 9 2ND LOOK	15733	864	REFL 1 POS 26 2ND LOOK	1927
288	REFL 2 POS 9 2ND LOOK	15380	866	REFL 2 POS 26 2ND LOOK	1575
290	WARM CAL SAMPLE 9	16081	868	WARM CAL SAMPLE 26	16070
292	CH 4	16704	870	CH 4	16694

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15990	872	REFLECTOR 1 POSITION 27	16069
296	CH 6	17313	874	CH 3	16706
298	CH 7	15751	876	CH 4	15994
300	CH 8	16853	878	CH 5	17296
302	CH 9	16536	880	CH 6	15740
304	CH 10	16781	882	CH 7	16845
306	CH 11	18242	884	CH 8	16530
308	CH 12	18421	886	CH 9	16772
310	CH 13	18393	888	CH 10	18232
312	CH 14	20244	890	CH 11	18411
314	CH 15	16692	892	CH 12	18399
316	REFLECTOR 1 POSITION 10	15893	894	CH 13	20233
318	REFLECTOR 2 POSITION 10	15538	896	CH 14	16687
320	REFL 1 POS 10 2ND LOOK	15884	898	CH 15	2237
322	REFL 2 POS 10 2ND LOOK	15533	900	REFLECTOR 2 POSITION 27	2237
324	WARM CAL SAMPLE 10	16085	902	REFL 1 POS 27 2ND LOOK	1884
326	CH 3	16716	904	REFL 2 POS 27 2ND LOOK	2229
328	CH 4	16002	906	WARM CAL SAMPLE 27	1879
330	CH 5	17302	908	CH 3	16112
332	CH 6	15750	910	CH 4	16761
334	CH 7	16860	912	CH 5	16034
336	CH 8	16530	914	CH 6	17299
338	CH 9	16775	916	CH 7	15740
340	CH 10	18239	918	CH 8	16884
342	CH 11	18413	920	CH 9	16526
344	CH 12	18394	922	CH 10	16774
346	CH 13	20253	924	CH 11	18239
348	CH 14	16691	926	CH 12	18414
350	CH 15	16042	928	CH 13	18378
352	REFLECTOR 1 POSITION 11	15688	930	CH 14	20253
354	REFL 1 POS 11 2ND LOOK	16036	932	CH 15	16686
356	REFL 2 POS 11 2ND LOOK	15683	934	REFLECTOR 1 POSITION 29	2387
358	WARM CAL SAMPLE 11	16108	936	REFLECTOR 2 POSITION 29	2034
360	CH 3	16743	938	REFL 1 POS 29 2ND LOOK	2382
362	CH 4	16029	940	REFL 2 POS 29 2ND LOOK	2029
364	CH 5	17305	942	WARM CAL SAMPLE 29	16101
366	CH 6	15744	944	CH 3	
368	CH 7	16876	946	CH 4	
370	CH 8	16535	948	CH 5	
372	CH 9	16779	950	CH 6	
374	CH 10	18237	952	CH 7	
376	CH 11	18417	954	CH 8	
378	CH 12	18402	956	CH 9	
380	CH 13	20246	958	CH 10	
382	CH 14	16690	960	CH 11	
384	CH 15	16196	962	CH 12	
386	REFLECTOR 1 POSITION 12	15840	964	CH 13	
388	REFLECTOR 2 POSITION 12	16188	966	CH 14	
390	REFL 1 POS 12 2ND LOOK	15835	968	CH 15	
392	REFL 2 POS 12 2ND LOOK	16094	970	REFLECTOR 1 POSITION 29	
	WARM CAL SAMPLE 12			REFLECTOR 2 POSITION 29	
	CH 3			REFL 1 POS 29 2ND LOOK	
				REFL 2 POS 29 2ND LOOK	
				WARM CAL SAMPLE 29	
				CH 3	

WARM CAL MODE

HOS A1\_03 E1.EXE;40

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16717	972	REFLECTOR 1 POSITION 30	16738
396	CH 5	16001	974	REFLECTOR 2 POSITION 30	16020
398	CH 6	17304	976	REFL 1 POS 30 2ND LOOK	17296
400	CH 7	15749	978	REFL 2 POS 30 2ND LOOK	15738
402	CH 8	16862	980	WARM CAL SAMPLE 30	16875
404	CH 9	16533	982	CH 3	16522
406	CH 10	16774	984	CH 4	16770
408	CH 11	18231	986	CH 5	18225
410	CH 12	18406	988	CH 6	18412
412	CH 13	18402	990	CH 7	18393
414	CH 14	20237	992	CH 8	20231
416	CH 15	16690	994	CH 9	16685
418	REFLECTOR 1 POSITION 13	16349	996	CH 10	2541
420	REFLECTOR 2 POSITION 13	15991	998	CH 11	2185
422	REFL 1 POS 13 2ND LOOK	16340	1000	CH 12	2534
424	REFL 2 POS 13 2ND LOOK	15986	1002	CH 13	2181
426	WARM CAL SAMPLE 13	16079	1004	CH 14	16065
428	CH 3	16704	1006	CH 15	16700
430	CH 4	15988	1008	REFLECTOR 1 COLD CAL POS	15983
432	CH 5	17301	1010	REFLECTOR 2 COLD CAL POS	17295
434	CH 6	15748	1012	REFL 1 COLD CAL 2ND LOOK	15738
436	CH 7	16851	1014	REFL 2 COLD CAL 2ND LOOK	16838
438	CH 8	16532	1016	COLD CAL DATA 1	16524
440	CH 9	16778	1018	CH 3	16767
442	CH 10	18238	1020	CH 4	18230
444	CH 11	18419	1022	CH 5	18407
446	CH 12	18380	1024	CH 6	18395
448	CH 13	20253	1026	CH 7	20225
450	CH 14	16689	1028	CH 8	16683
452	CH 15	115	1030	CH 9	4132
454	REFLECTOR 1 POSITION 14	16140	1032	CH 10	3780
456	REFLECTOR 2 POSITION 14	108	1034	CH 11	4132
458	REFL 1 POS 14 2ND LOOK	16139	1036	CH 12	3780
460	REFL 2 POS 14 2ND LOOK	16074	1038	CH 13	16067
462	WARM CAL SAMPLE 14	16701	1040	CH 14	16695
464	CH 3	15985	1042	CH 15	15979
466	CH 4	17306	1044	CH 3	17323
468	CH 5	15748	1046	CH 4	15764
470	CH 6	16849	1048	CH 5	16833
472	CH 7	16532	1050	CH 6	16550
474	CH 8	16777	1052	CH 7	16792
476	CH 9	18236	1054	CH 8	18258
478	CH 10	18420	1056	CH 9	18428
480	CH 11	18392	1058	CH 10	18407
482	CH 12	20247	1060	CH 11	20258
484	CH 13	16687	1062	CH 12	16706
486	CH 14	265	1064	CH 13	16066
488	CH 15	16294	1066	CH 14	16695
490	REFLECTOR 1 POSITION 15	259	1068	CH 15	15983
492	REFLECTOR 2 POSITION 15	16291	1070	CH 3	17326
	REFL 1 POS 15 2ND LOOK			CH 4	
	REFL 2 POS 15 2ND LOOK			CH 5	
				CH 6	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	WARM CAL SAMPLE 15	16071	1072	CH 3	15764
496		16702	1074	CH 4	16837
498		15988	1076	CH 5	16551
500		17300	1078	CH 6	16799
502		15748	1080	CH 7	18259
504		16845	1082	CH 8	18421
506		16530	1084	CH 9	18417
508		16776	1086	CH 10	20282
510		18243	1088	CH 11	16704
512		18406	1182	CH 12	8528
514		18391	1184	CH 13	8179
516		20259	1186	CH 14	8528
518		16689	1188	CH 15	8178
520	REFLECTOR 1 POSITION 16	421	1190	REFLECTOR 1 WARM CAL POS	16108
522	REFLECTOR 2 POSITION 16	62	1192	REFLECTOR 2 WARM CAL POS	16747
524	REFL 1 POS 16 2ND LOOK	410	1194	REFL 1 WARM CAL 2ND LOOK	16030
526	REFL 2 POS 16 2ND LOOK	58	1196	REFL 2 WARM CAL 2ND LOOK	17329
528	WARM CAL SAMPLE 16	16074	1198	WARM CAL DATA 1	15773
530		16705	1200	CH 3	16889
532		15987	1202	CH 4	16557
534		17306	1204	CH 5	16802
536		15750	1206	CH 6	18267
538		16848	1208	CH 7	18449
540		16531	1210	CH 8	18420
542		16778	1212	CH 9	20261
544		18242	1214	CH 10	16708
546		18416	1216	CH 11	16108
548		18378	1218	CH 12	16751
550		20235	1220	CH 13	16029
552		16690	1222	CH 14	17327
554	REFLECTOR 1 POSITION 17	571	1224	CH 15	15769
556	REFLECTOR 2 POSITION 17	212	1226	CH 3	16891
558	REFL 1 POS 17 2ND LOOK	563	1228	CH 4	16554
560	REFL 2 POS 17 2ND LOOK	211	1230	CH 5	16805
562	WARM CAL SAMPLE 17	16074	1232	CH 6	18263
564		16705	1234	CH 7	18443
566		15988	1236	CH 8	18425
568		17302	1238	CH 9	20276
570		15748	1240	CH 10	16705

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE	DEG C
1090	SCAN MOTOR A1-1	17849	22.65	
1092	SCAN MOTOR A1-2	18923	23.98	
1094	FEED HORN A1-1	19064	25.30	
1096	FEED HORN A1-2	19765	26.68	
1098	RF MUX A1-1	20383	27.66	
1100	RF MUX A1-2	21273	29.47	
1102	LOCAL OSCILLATOR CHANNEL 3	22157	31.42	
1104	LOCAL OSCILLATOR CHANNEL 4	22556	31.50	
1106	LOCAL OSCILLATOR CHANNEL 5	21573	30.25	
1108	LOCAL OSCILLATOR CHANNEL 6	21102	28.41	
1110	LOCAL OSCILLATOR CHANNEL 7	20996	28.91	
1112	LOCAL OSCILLATOR CHANNEL 8	22056	31.04	
1114	LOCAL OSCILLATOR CHANNEL 15	21892	30.27	
1116	PLLO #2	20262	27.46	
1118	PLLO #1	22890	32.56	
1120	1553 INTERFACE	16280	32.74	
1122	MIXER/IF AMPLIFIER CHANNEL 3	21533	29.85	
1124	MIXER/IF AMPLIFIER CHANNEL 4	21700	29.80	
1126	MIXER/IF AMPLIFIER CHANNEL 5	21403	29.61	
1128	MIXER/IF AMPLIFIER CHANNEL 6	20669	28.22	
1130	MIXER/IF AMPLIFIER CHANNEL 7	20541	28.53	
1132	MIXER/IF AMPLIFIER CHANNEL 8	21609	29.94	
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	20177	27.50	
1136	MIXER/IF AMPLIFIER CHANNEL 15	21712	30.45	
1138	MIXER/IF AMPLIFIER CHANNEL 11 THRU 14	21422	29.30	
1140	IF AMPLIFIER CHANNEL 9	21579	28.79	
1142	IF AMPLIFIER CHANNEL 10	21442	29.88	
1144	IF AMPLIFIER CHANNEL 11	20866	27.91	
1146	DC/DC CONVERTER	23374	32.77	
1148	IF AMPLIFIER CHANNEL 13	20478	27.30	
1150	IF AMPLIFIER CHANNEL 14	20828	28.42	
1152	IF AMPLIFIER CHANNEL 12	20621	27.80	
1154	RF SHELF A1-1	20980	28.80	
1156	RF SHELF A1-2	21448	29.06	
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	19473	25.95	
1160	A1-1 WARM LOAD 1	23379	23.76	
1162	A1-1 WARM LOAD 2	23871	23.87	
1164	A1-1 WARM LOAD 3	23378	23.91	
1166	A1-1 WARM LOAD 4	23453	23.88	
1168	A1-1 WARM LOAD CENTER	23654	23.90	
1170	A1-2 WARM LOAD 1	24426	25.29	
1172	A1-2 WARM LOAD 2	24474	25.29	
1174	A1-2 WARM LOAD 3	24485	25.28	
1176	A1-2 WARM LOAD 4	24481	25.18	
1178	A1-2 WARM LOAD CENTER	24484	25.28	
1180	TEMP SENSOR REFERENCE VOLTAGE	25265		



## DESCRIPTION

## STATUS

ANTENNA IN FULL SCAN MODE	YES
ANTENNA IN WARM CAL MODE	NO
ANTENNA IN COLD CAL MODE	NO
ANTENNA IN NADIR MODE	NO
COLD CAL. POSITION LSB	ZERO
COLD CAL. POSITION MSB	ZERO
PLO REDUNDANCY	PLLO # 1
SCANNER A1-1 POWER	ON
SCANNER A1-2 POWER	ON
PLLO #1 LOCK	YES
PLLO #2 LOCK	OFF
ADC LATCHUP FLAG	ONE

## ENGINEERING DATA

DESCRIPTION	VALUE	MA/VOLTS	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	22076	4.9	22.6
A1-1 RF SHELF TEMPERATURE #1	21820	15.1	25.5
A1-1 WARM LOAD TEMPERATURE	21796	-15.0	23.4
A1-2 SCANNER MOTOR TEMPERATURE	22175	4.9	24.9
A1-2 RF SHELF TEMPERATURE #1	22223	14.9	27.5
A1-2 WARM LOAD TEMPERATURE	21854	-15.1	25.2
A1-1 RF SHELF TEMPERATURE #2	22585	14.8	25.4
A1-2 RF SHELF TEMPERATURE #2	22070	-15.2	27.2

## SIGNAL PROCESSOR

+5 VDC	22076	4.9
+15 VDC	21820	15.1
-15 VDC	21796	-15.0
+5 VDC	22175	4.9
+15 VDC	22223	14.9
-15 VDC	21854	-15.1
+15 VDC	22585	14.8
-15 VDC	22070	-15.2
+8 VDC	21827	7.9
+10 VDC	21422	10.0
+10 VDC	21433	10.0
+10 VDC	21399	10.0
+10 VDC	21445	10.0

## PLO

RECEIVER	32767	325.7
MIXER/IF AMPLIFIER A1-1	21251	10.1
A1-2	21181	10.1
LO CHANNEL 6	21408	10.0
7	21311	10.0
SPARE	22015	15.0
LO CHANNEL 3	16219	2261.4
4	17288	33.6
5	14640	17.9
8		
15		

## QUIET BUS CURRENT

A1-1 NOISY POWER BUS CURRENT	16219	2261.4
A1-2 NOISY POWER BUS CURRENT	17288	33.6
	14640	17.9

AZONIX DATA  
WARM CAL MODE

PRT TEMPERATURES

VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

FIXED TARGET

BASEPLATE

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00	577	74.00
575	73.00	581	76.00
579	75.00		

THERMOCOUPLE TEMPERATURES

FIXED TARGET SHROUD

VARIABLE TARGET SHROUD

FIXED TARGET N2

VARIABLE TARGET N2

HEATER N2

- FIXED TARGET FLOW METER
- VARIABLE TARGET FLOW METER
- BASEPLATE HEATER N2
- BASEPLATE N2
- BASEPLATE FLOW METER
- ADJUNCT RADIATORS

**TEST DATA SHEET NO. 10** (Sheet 1 of 2)  
Science and Engineering Data Test (Warm Cal Mode) (Paragraph 3.3.5.3.2)

Step	Instrument Status	(Y)es / (N)o
1	Warm Cal Mode command received?	yes
2	ENGR OK message seen?	yes
3	Both reflectors positioned at warm loads?	yes

Yes = Pass No = Fail

Step	Element	Description	Measured Value* (Binary)	Required Value (Binary)	(P)ass/(F)ail
4a	1-2	Packet ID		0000100100000011	Pass
4b	3-4	Packet Length		0000001010111111	Pass
4c	5-6	Unit Serial Number		0000001100000000	Pass
4d	7-8	Instrument Mode/ Status		1001101000000100	Pass

RADIOMETER SCENE DATA			
Step	Description	Required Counts	(P)ass/(F)ail
4f	Review All Scene Data	12500-20500	Pass

PRT TEMPERATURE DATA				
Step	Element	Description	Required	(P)ass/(F)ail
4g	1090-1178	Review All PRT Data**	10-40 degrees C	Pass
4g	1180	Temperature Sensor Reference	23244-26317 counts	Pass

STATUS				
Step	Description	Status*	Required Status	(P)ass/(F)ail
4h	Antenna in Full Scan Mode		NO	Pass
	Antenna in Warm Cal Mode		YES	
	Antenna in Cold Cal Mode		NO	
	Antenna in Nadir Mode		NO	
	Cold Cal Position LSB		ZERO	
	Cold Cal Position MSB		ZERO	
	PLO Redundancy		PLO #1	
	Scanner A1-1 Power		ON	
	Scanner A1-2 Power		ON	
	PLO #1 Lock		YES	
	PLO #2 Lock		OFF	
	ADC Latchup Flag		ONE	Pass

\* Rewriting printout data on this data sheet is optional.

\*\* Refer to Table IV for PRT Data Description

EOS/AMSU-A1 System P/N 1356008

Circle Test: 1<sup>st</sup> CPT

Final CPT

Shop Order: 560863

Sub CPT N/A

S/N: 202

LPT N/A

open. 0580

*[Signature]*  
Customer Representative

11-20-98  
Date

*[Signature]*  
Test Systems Engineer  
13 Nov. 98  
200 NOV 19 1998  
Date  
Quality Control



**TEST DATA SHEET NO. 10** (Sheet 2 of 2)  
Science and Engineering Data Test (Warm Cal Mode) (Paragraph 3.3.5.3.2)

REFLECTOR POSITIONS (Step 4e)						
BP	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
1-30	8525	8528	Pass	8178	8176	Pass

\* Actual range (min to max) of counts from printout (Only beam positions 1-30).  
Rewriting counts on this data sheet is optional.

\*\* Required counts from AE26002/1 TDS 5&6  $\pm 5$  counts for warm calibration position

ENGINEERING DATA				
Step	Description	Measured***	Required	(P)ass/(F)ail
4i	Signal Processor (+5 VDC)		+4 to +6 volts	Pass
	Signal Processor (+15 VDC)		+14 to +16 volts	
	Signal Processor (-15 VDC)		-14 to -16 volts	
	Scan Drive (+5 VDC)		+4 to +6 volts	
	Scan Drive (+15 VDC)		+14 to +16 volts	
	Scan Drive (-15 VDC)		-14 to -16 volts	
	PLO (+15 VDC)		+14 to +16 volts	
	PLO (-15 VDC)		-14 to -16 volts	
	Receiver (+8 VDC)		+7 to +9 volts	
	Mixer/IF Amplifier A1-1 (+10 VDC)		+9 to +11 volts	
	Mixer/IF Amplifier A1-2 (+10 VDC)		+9 to +11 volts	
	LO Channel 6		+9 to +11 volts	
	LO Channel 7		+9 to +11 volts	
	LO Channel 3		+9 to +11 volts	
	LO Channel 4		+9 to +11 volts	
	LO Channel 5		+9 to +11 volts	
	LO Channel 8		+9 to +11 volts	
	LO Channel 15		+9 to +11 volts	
	Quiet Bus Current		+14 to +16 volts	
	A1-1 Noisy Bus Current		$\leq 3$ Amps	
	A1-2 Noisy Bus Current		$\leq 125$ milliamps	
			$\leq 125$ milliamps	Pass

\*\*\* Rewriting printout data on this data sheet is optional.

EOS/AMSU-A1 System P/N 1356008  
Circle Test: 1<sup>st</sup> CPT Final CPT

Shop Order: 560863 S/N: 202  
Sub CPT N/A LPT N/A

J. S. S. S. 11-20-98  
Customer Representative Date

Roger Khoury 13 Nov 98  
Test Systems Engineer Date  
200 NOV 19 1998  
Quality Control Date



EOS	AI-03	E1.EXE;40	WARM CAL MODE	P1	13-NOV-98	13:32:56	SCAN NUMBER	565
[ 5 ]	SCIENCE	DATA	ELEMENT 0000					
[ 6 ]	CONTROL/STATUS	ELEMENT	00					
[ 7 ]	ENGINEERING	ELEMENT	00					

COMMANDS				PLLO POWER =	PLLO#1 [ 15 ]
[ 9 ]	SCANNER AI-1	POWER =	ON	COLD CAL POSITION 1 =	YES [ 16 ]
[ 10 ]	SCANNER AI-2	POWER =	ON	2 =	NO [ 17 ]
[ 11 ]	ANTENNA FULL	SCAN MODE =	NO	3 =	NO [ 18 ]
[ 12 ]	WARM CAL	=	YES	COLD CAL POSITION 4 =	NO [ 19 ]
[ 13 ]	COLD CAL	=	NO	RESET C&DH PROCESSOR	[ 20 ]
[ 14 ]	NADIR	=	NO	GSE MODE	[ 21 ]

ENGR OK	POWER	ON	CHECKSUM	IN B75F	CALC B75F	SA28	399	SA29	797
SELECT BUTTON 3			SCREEN ONLY [ 2 ]	PRINT [ 3 ]	FULL		[ 1 ]	RETURN	

Final CPT - EOS/AMSU-A1 S/W 202  
 S/O 560863 OPER. 0580  
 Support TDS 10 of AE-26156/9

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	COLD CAL SAMPLE 17	16719
2		00000011	574	CH 8	16448
3	PACKET LENGTH	00000010	576	CH 9	16679
4		10111111	578	CH 10	17944
5	UNIT SERIAL NUMBER	00000011	580	CH 11	18097
6		00000000	582	CH 12	18048
7	INSTRUMENT MODE/STATUS	10011010	584	CH 13	19873
8		00000100	586	CH 14	16589
10	REFLECTOR 1 POSITION	8525	588	CH 15	8525
12	REFLECTOR 2 POSITION	8177	590	REFLECTOR 1 POSITION 18	8177
14	REFL 1 POS 1 2ND LOOK	8525	592	REFLECTOR 2 POSITION 18	8525
16	REFL 2 POS 1 2ND LOOK	8178	594	REFL 1 POS 18 2ND LOOK	8177
18	COLD CAL SAMPLE 1	16013	596	REFL 2 POS 18 2ND LOOK	16010
20		16595	598	COLD CAL SAMPLE 18	16592
22		15880	600	CH 3	15882
24		17238	602	CH 4	17241
26		15658	604	CH 5	15658
28		16720	606	CH 6	16720
30		16450	608	CH 7	16453
32		16674	610	CH 8	16676
34		17947	612	CH 9	16676
36		18096	614	CH 10	17954
38		18038	616	CH 11	18110
40		19867	618	CH 12	18048
42		16590	620	CH 13	19846
44	REFLECTOR 1 POSITION	8525	622	CH 14	16589
46	REFLECTOR 2 POSITION	8177	624	CH 15	8525
48	REFL 1 POS 2 2ND LOOK	8525	626	REFLECTOR 1 POSITION 19	8178
50	REFL 2 POS 2 2ND LOOK	8178	628	REFLECTOR 2 POSITION 19	8525
52	COLD CAL SAMPLE 2	16014	630	REFL 1 POS 19 2ND LOOK	8177
54		16593	632	REFL 2 POS 19 2ND LOOK	16016
56		15881	634	COLD CAL SAMPLE 19	16596
58		17237	636	CH 3	15881
60		15657	638	CH 4	17237
62		16719	640	CH 5	15655
64		16456	642	CH 6	16720
66		16679	644	CH 7	16453
68		17948	646	CH 8	16675
70		18117	648	CH 9	17945
72		18042	650	CH 10	18107
74		19843	652	CH 11	18065
76		16590	654	CH 12	19846
78	REFLECTOR 1 POSITION	8525	656	CH 13	16590
80	REFLECTOR 2 POSITION	8178	658	CH 14	8525
82	REFL 1 POS 3 2ND LOOK	8525	660	REFLECTOR 1 POSITION 20	8177
84	REFL 2 POS 3 2ND LOOK	8178	662	REFLECTOR 2 POSITION 20	8525
86	COLD CAL SAMPLE 3	16021	664	REFL 1 POS 20 2ND LOOK	8178
88		16595	666	REFL 2 POS 20 2ND LOOK	16020
90		15883	668	COLD CAL SAMPLE 20	16596
92		17240	670	CH 3	15881
				CH 4	17239
				CH 5	
				CH 6	



ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15657	672	CH 7	15654
96	CH 8	16716	674	CH 8	16720
98	CH 9	16456	676	CH 9	16453
100	CH 10	16675	678	CH 10	16677
102	CH 11	17948	680	CH 11	17950
104	CH 12	18100	682	CH 12	18110
106	CH 13	18050	684	CH 13	18058
108	CH 14	19860	686	CH 14	19841
110	CH 15	16590	688	CH 15	16590
112	REFLECTOR 1 POSITION 4	8525	690	REFLECTOR 1 POSITION 21	8525
114	REFLECTOR 2 POSITION 4	8177	692	REFLECTOR 2 POSITION 21	8178
116	REFL 1 POS 4 2ND LOOK	8525	694	REFL 1 POS 21 2ND LOOK	8525
118	REFL 2 POS 4 2ND LOOK	8178	696	REFL 2 POS 21 2ND LOOK	8178
120	COLD CAL SAMPLE 4	16013	698	COLD CAL SAMPLE 21	16016
122	CH 3	16593	700	CH 3	16594
124	CH 4	15883	702	CH 4	15883
126	CH 5	17238	704	CH 5	17237
128	CH 6	15659	706	CH 6	15658
130	CH 7	16720	708	CH 7	16719
132	CH 8	16448	710	CH 8	16453
134	CH 9	16680	712	CH 9	16681
136	CH 10	17953	714	CH 10	17949
138	CH 11	18112	716	CH 11	18109
140	CH 12	18051	718	CH 12	18052
142	CH 13	19816	720	CH 13	19867
144	CH 14	16591	722	CH 14	16589
146	CH 15	8525	724	CH 15	8525
148	REFLECTOR 1 POSITION 5	8177	726	REFLECTOR 1 POSITION 22	8177
150	REFLECTOR 2 POSITION 5	8525	728	REFLECTOR 2 POSITION 22	8525
152	REFL 1 POS 5 2ND LOOK	8178	730	REFL 1 POS 22 2ND LOOK	8177
154	REFL 2 POS 5 2ND LOOK	16019	732	REFL 2 POS 22 2ND LOOK	8177
156	COLD CAL SAMPLE 5	16595	734	COLD CAL SAMPLE 22	16014
158	CH 3	15881	736	CH 3	16594
160	CH 4	17233	738	CH 4	15880
162	CH 5	15654	740	CH 5	17239
164	CH 6	16720	742	CH 6	15655
166	CH 7	16457	744	CH 7	16719
168	CH 8	16677	746	CH 8	16455
170	CH 9	17948	748	CH 9	16671
172	CH 10	18110	750	CH 10	17950
174	CH 11	18053	752	CH 11	18100
176	CH 12	19829	754	CH 12	18054
178	CH 13	16589	756	CH 13	19852
180	CH 14	8525	758	CH 14	16589
182	CH 15	8178	760	REFLECTOR 1 POSITION 23	8525
184	REFLECTOR 1 POSITION 6	8525	762	REFLECTOR 2 POSITION 23	8177
186	REFL 1 POS 6 2ND LOOK	8178	764	REFL 1 POS 23 2ND LOOK	8525
188	REFL 2 POS 6 2ND LOOK	16014	766	REFL 2 POS 23 2ND LOOK	8177
190	COLD CAL SAMPLE 6	16594	768	COLD CAL SAMPLE 23	16013
192	CH 3	15885	770	CH 3	16594
	CH 4			CH 4	15878
	CH 5			CH 5	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17234	772	CH 6	17243
196	CH 7	15657	774	CH 7	15658
198	CH 8	16720	776	CH 8	16719
200	CH 9	16455	778	CH 9	16451
202	CH 10	16672	780	CH 10	16675
204	CH 11	17958	782	CH 11	17951
206	CH 12	18111	784	CH 12	18109
208	CH 13	18061	786	CH 13	18064
210	CH 14	19851	788	CH 14	19834
212	CH 15	16589	790	CH 15	16588
214	REFLECTOR 1 POSITION 7	8525	792	REFLECTOR 1 POSITION 24	8525
216	REFLECTOR 2 POSITION 7	8178	794	REFLECTOR 2 POSITION 24	8177
218	REFL 1 POS 7 2ND LOOK	8525	796	REFL 1 POS 24 2ND LOOK	8525
220	REFL 2 POS 7 2ND LOOK	8177	798	REFL 2 POS 24 2ND LOOK	8178
222	COLD CAL SAMPLE 7	16014	800	COLD CAL SAMPLE 24	16014
224	CH 3	16591	802	CH 3	16596
226	CH 4	15881	804	CH 4	15881
228	CH 5	17238	806	CH 5	17234
230	CH 6	15657	808	CH 6	15657
232	CH 7	16720	810	CH 7	16722
234	CH 8	16451	812	CH 8	16456
236	CH 9	16675	814	CH 9	16677
238	CH 10	17952	816	CH 10	17950
240	CH 11	18105	818	CH 11	18110
242	CH 12	18051	820	CH 12	18049
244	CH 13	19843	822	CH 13	19864
246	CH 14	16591	824	CH 14	16589
248	CH 15	8525	826	CH 15	8525
250	REFLECTOR 1 POSITION 8	8178	828	REFLECTOR 1 POSITION 25	8178
252	REFLECTOR 2 POSITION 8	8525	830	REFLECTOR 2 POSITION 25	8525
254	REFL 1 POS 8 2ND LOOK	8177	832	REFL 1 POS 25 2ND LOOK	8177
256	REFL 2 POS 8 2ND LOOK	16018	834	REFL 2 POS 25 2ND LOOK	16014
258	COLD CAL SAMPLE 8	16594	836	COLD CAL SAMPLE 25	16596
260	CH 3	15880	838	CH 3	15881
262	CH 4	17236	840	CH 4	17239
264	CH 5	15658	842	CH 5	15658
266	CH 6	16722	844	CH 6	16719
268	CH 7	16456	846	CH 7	16456
270	CH 8	16678	848	CH 8	16674
272	CH 9	17948	850	CH 9	17950
274	CH 10	18110	852	CH 10	18099
276	CH 11	18052	854	CH 11	18048
278	CH 12	19841	856	CH 12	19828
280	CH 13	16589	858	CH 13	16588
282	CH 14	8525	860	CH 14	8525
284	CH 15	8176	862	CH 15	8178
286	REFLECTOR 1 POSITION 9	8525	864	REFLECTOR 1 POSITION 26	8525
288	REFLECTOR 2 POSITION 9	8177	866	REFLECTOR 2 POSITION 26	8177
290	REFL 1 POS 9 2ND LOOK	16018	868	REFL 1 POS 26 2ND LOOK	16013
292	REFL 2 POS 9 2ND LOOK	16594	870	REFL 2 POS 26 2ND LOOK	16595
	COLD CAL SAMPLE 9			COLD CAL SAMPLE 26	
	CH 3			CH 3	
	CH 4			CH 4	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15881	872	REFLECTOR 1 POSITION 27	16013
296	CH 6	17238	874	REFLECTOR 2 POSITION 27	16591
298	CH 7	15657	876	REFL 1 POS 27 2ND LOOK	15882
300	CH 8	16719	878	REFL 2 POS 27 2ND LOOK	17235
302	CH 9	16452	880	COLD CAL SAMPLE 27	15660
304	CH 10	16677	882	CH 3	16719
306	CH 11	17950	884	CH 4	16453
308	CH 12	18107	886	CH 5	16676
310	CH 13	18047	888	CH 6	17950
312	CH 14	19837	890	CH 7	18110
314	CH 15	16588	892	CH 8	18045
316	REFLECTOR 1 POSITION 10	8525	894	CH 9	19838
318	REFLECTOR 2 POSITION 10	8177	896	CH 10	16590
320	REFL 1 POS 10 2ND LOOK	8525	898	CH 11	8525
322	REFL 2 POS 10 2ND LOOK	8177	900	CH 12	8178
324	COLD CAL SAMPLE 10	16013	902	CH 13	8525
326	CH 3	16594	904	CH 14	8177
328	CH 4	15883	906	CH 15	16013
330	CH 5	17236	908	REFLECTOR 1 POSITION 28	16591
332	CH 6	15658	910	REFLECTOR 2 POSITION 28	15882
334	CH 7	16722	912	REFL 1 POS 28 2ND LOOK	17235
336	CH 8	16452	914	REFL 2 POS 28 2ND LOOK	15660
338	CH 9	16680	916	COLD CAL SAMPLE 28	16719
340	CH 10	17947	918	CH 3	16453
342	CH 11	18102	920	CH 4	16676
344	CH 12	18058	922	CH 5	17950
346	CH 13	19847	924	CH 6	18110
348	CH 14	16590	926	CH 7	18045
350	CH 15	8525	928	CH 8	19838
352	REFLECTOR 1 POSITION 11	8177	930	CH 9	16590
354	REFLECTOR 2 POSITION 11	8525	932	CH 10	8525
356	REFL 1 POS 11 2ND LOOK	8525	934	CH 11	8178
358	REFL 2 POS 11 2ND LOOK	8178	936	CH 12	8525
360	COLD CAL SAMPLE 11	16011	938	CH 13	8177
362	CH 3	16595	940	CH 14	16017
364	CH 4	15886	942	CH 15	16592
366	CH 5	17242	944	REFLECTOR 1 POSITION 29	15882
368	CH 6	15658	946	REFLECTOR 2 POSITION 29	17237
370	CH 7	16720	948	REFL 1 POS 29 2ND LOOK	17237
372	CH 8	16452	950	REFL 2 POS 29 2ND LOOK	15654
374	CH 9	16676	952	COLD CAL SAMPLE 29	16721
376	CH 10	17951	954	CH 3	16455
378	CH 11	18107	956	CH 4	16679
380	CH 12	18038	958	CH 5	17943
382	CH 13	19846	960	CH 6	18107
384	CH 14	16591	962	CH 7	18043
386	CH 15	8525	964	CH 8	19843
388	REFLECTOR 1 POSITION 12	8177	966	CH 9	16588
390	REFLECTOR 2 POSITION 12	8525	968	CH 10	8525
392	REFL 1 POS 12 2ND LOOK	8525	970	CH 11	8177
	REFL 2 POS 12 2ND LOOK	8177		CH 12	8525
	COLD CAL SAMPLE 12	16011		CH 13	8178
	CH 3			CH 14	16015

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16594	972	CH 4	16591
396	CH 5	15878	974	CH 5	15880
398	CH 6	17242	976	CH 6	17238
400	CH 7	15654	978	CH 7	15658
402	CH 8	16718	980	CH 8	16721
404	CH 9	16453	982	CH 9	16448
406	CH 10	16677	984	CH 10	16680
408	CH 11	17947	986	CH 11	17949
410	CH 12	18113	988	CH 12	18109
412	CH 13	18048	990	CH 13	18044
414	CH 14	19869	992	CH 14	19833
416	CH 15	16589	994	CH 15	16590
418	REFLECTOR 1 POSITION 13	8525	996	REFLECTOR 1 POSITION 30	8525
420	REFLECTOR 2 POSITION 13	8178	998	REFLECTOR 2 POSITION 30	8177
422	REFL 1 POS 13 2ND LOOK	8525	1000	REFL 1 POS 30 2ND LOOK	8525
424	REFL 2 POS 13 2ND LOOK	8177	1002	REFL 2 POS 30 2ND LOOK	8177
426	COLD CAL SAMPLE 13	16014	1004	COLD CAL SAMPLE 30	16014
428	CH 3	16592	1006	CH 3	16595
430	CH 4	15883	1008	CH 4	15881
432	CH 5	17241	1010	CH 5	17237
434	CH 6	15659	1012	CH 6	15657
436	CH 7	16719	1014	CH 7	16720
438	CH 8	16455	1016	CH 8	16453
440	CH 9	16672	1018	CH 9	16675
442	CH 10	17954	1020	CH 10	17947
444	CH 11	18113	1022	CH 11	18105
446	CH 12	18048	1024	CH 12	18051
448	CH 13	19855	1026	CH 13	19841
450	CH 14	16589	1028	CH 14	16588
452	CH 15	8525	1030	CH 15	0E
454	REFLECTOR 1 POSITION 14	8178	1032	REFLECTOR 1 COLD CAL POS	0E
456	REFLECTOR 2 POSITION 14	8525	1034	REFLECTOR 2 COLD CAL POS	0E
458	REFL 1 POS 14 2ND LOOK	8178	1036	REFL 1 COLD CAL 2ND LOOK	0E
460	REFL 2 POS 14 2ND LOOK	16011	1038	REFL 2 COLD CAL 2ND LOOK	0
462	COLD CAL SAMPLE 14	16595	1040	COLD CAL DATA 1	0
464	CH 3	15885	1042	CH 3	0
466	CH 4	17239	1044	CH 4	0
468	CH 5	15657	1046	CH 5	0
470	CH 6	16718	1048	CH 6	0
472	CH 7	16451	1050	CH 7	0
474	CH 8	16673	1052	CH 8	0
476	CH 9	17948	1054	CH 9	0
478	CH 10	18112	1056	CH 10	0
480	CH 11	18051	1058	CH 11	0
482	CH 12	19831	1060	CH 12	0
484	CH 13	16589	1062	CH 13	0
486	CH 14	8525	1064	CH 14	0
488	CH 15	8177	1066	CH 15	0
490	REFLECTOR 1 POSITION 15	8525	1068	REFLECTOR 2 POSITION 15	0
492	REFLECTOR 2 POSITION 15	8177	1070	REFL 1 POS 15 2ND LOOK	0
				REFL 2 POS 15 2ND LOOK	0

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	COLD CAL SAMPLE 15	16013	CH 3		0
496		16593	CH 4		0
498		15884	CH 5		0
500		17237	CH 6		0
502		15657	CH 7		0
504		16719	CH 8		0
506		16453	CH 9		0
508		16678	CH 10		0
510		17950	CH 11		0
512		18107	CH 12		0
514		18047	CH 13		0
516		19856	CH 14		0
518		16590	CH 15		0
520	REFLECTOR 1 POSITION 16	8525	REFLECTOR 1 WARM CAL POS		OE
522	REFLECTOR 2 POSITION 16	8177	REFLECTOR 2 WARM CAL POS		OE
524	REFL 1 POS 16 2ND LOOK	8525	REFL 1 WARM CAL 2ND LOOK		OE
526	REFL 2 POS 16 2ND LOOK	8177	REFL 2 WARM CAL 2ND LOOK		OE
528	COLD CAL SAMPLE 16	8177	WARM CAL DATA 1		0
530		16009	CH 3		0
532		16594	CH 4		0
534		15885	CH 5		0
536		17234	CH 6		0
538		15657	CH 7		0
540		16721	CH 8		0
542		16453	CH 9		0
544		16680	CH 10		0
546		17943	CH 11		0
548		18104	CH 12		0
550		18053	CH 13		0
552		19836	CH 14		0
554		16590	CH 15		0
556	REFLECTOR 1 POSITION 17	8525	WARM CAL DATA 2		0
558	REFLECTOR 2 POSITION 17	8177			0
560	REFL 1 POS 17 2ND LOOK	8525	CH 3		0
562	REFL 2 POS 17 2ND LOOK	8177	CH 4		0
564	COLD CAL SAMPLE 17	16013	CH 5		0
566		16592	CH 6		0
568		15883	CH 7		0
570		17234	CH 8		0
		15659	CH 9		0
			CH 10		0
			CH 11		0
			CH 12		0
			CH 13		0
			CH 14		0
			CH 15		0

EOS A1\_03 E1.EXE;40 SCIENCE DATA  
COLD CAL MODE

TEMPERATURE DEG C

ELEMENT DESCRIPTION

VALUE

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	18116	23.15
1092	SCAN MOTOR A1-2	19326	24.75
1094	FEED HORN A1-1	19884	26.86
1096	FEED HORN A1-2	21025	29.08
1098	RF MUX A1-1	21646	30.08
1100	RF MUX A1-2	22891	32.60
1102	LOCAL OSCILLATOR CHANNEL 3	23782	34.54
1104	LOCAL OSCILLATOR CHANNEL 4	24189	34.65
1106	LOCAL OSCILLATOR CHANNEL 5	23112	33.21
1108	LOCAL OSCILLATOR CHANNEL 6	22070	30.27
1110	LOCAL OSCILLATOR CHANNEL 7	22326	31.48
1112	LOCAL OSCILLATOR CHANNEL 8	23629	34.00
1114	LOCAL OSCILLATOR CHANNEL 15	23386	33.14
1116	PLLO #2	21616	30.05
1118	PLLO #1	24532	35.73
1120	1553 INTERFACE	17544	35.17
1122	MIXER/IF AMPLIFIER CHANNEL 3	23175	33.11
1124	MIXER/IF AMPLIFIER CHANNEL 4	23334	32.91
1126	MIXER/IF AMPLIFIER CHANNEL 5	22988	32.65
1128	MIXER/IF AMPLIFIER CHANNEL 6	21935	30.64
1130	MIXER/IF AMPLIFIER CHANNEL 7	21905	31.14
1132	MIXER/IF AMPLIFIER CHANNEL 8	23254	33.11
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	21407	29.84
1136	MIXER/IF AMPLIFIER CHANNEL 15	23137	33.19
1138	IF AMPLIFIER CHANNEL 11 THRU 14	22906	32.39
1140	IF AMPLIFIER CHANNEL 9	23078	32.35
1142	IF AMPLIFIER CHANNEL 10	22933	32.76
1144	IF AMPLIFIER CHANNEL 11	22052	30.19
1146	DC/DC CONVERTER	24842	35.61
1148	IF AMPLIFIER CHANNEL 13	21648	29.54
1150	IF AMPLIFIER CHANNEL 14	22005	30.67
1152	IF AMPLIFIER CHANNEL 12	21804	30.07
1154	RF SHELF A1-1	22398	31.51
1156	RF SHELF A1-2	23009	32.06
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	20290	27.49
1160	A1-1 WARM LOAD 1	23418	23.84
1162	A1-1 WARM LOAD 2	23916	23.96
1164	A1-1 WARM LOAD 3	23411	23.98
1166	A1-1 WARM LOAD 4	23488	23.95
1168	A1-1 WARM LOAD CENTER	23690	23.97
1170	A1-2 WARM LOAD 1	24600	25.63
1172	A1-2 WARM LOAD 2	24654	25.65
1174	A1-2 WARM LOAD 3	24669	25.65
1176	A1-2 WARM LOAD 4	24658	25.53
1178	A1-2 WARM LOAD CENTER	24667	25.64
1180	TEMP SENSOR REFERENCE VOLTAGE	25268	

## DESCRIPTION

## STATUS

ANTENNA IN FULL SCAN MODE	NO
ANTENNA IN WARM CAL MODE	YES
ANTENNA IN COLD CAL MODE	NO
ANTENNA IN NADIR MODE	NO
COLD CAL. POSITION LSB	ZERO
COLD CAL. POSITION MSB	ZERO
PLO REDUNDANCY	PLO # 1
SCANNER A1-1 POWER	ON
SCANNER A1-2 POWER	ON
PLO #1 LOCK	YES
PLO #2 LOCK	OFF
ADC LATCHUP FLAG	ONE

## ENGINEERING DATA

## DESCRIPTION

## DEG C

A1-1 SCANNER MOTOR TEMPERATURE	22.6
A1-1 RF SHELF TEMPERATURE	25.5
A1-1 WARM LOAD TEMPERATURE	23.4
A1-2 SCANNER MOTOR TEMPERATURE	24.9
A1-2 RF SHELF TEMPERATURE #1	27.5
A1-2 WARM LOAD TEMPERATURE	25.2
A1-1 RF SHELF TEMPERATURE #2	25.4
A1-2 RF SHELF TEMPERATURE #2	27.2

## VALUE

SIGNAL PROCESSOR	+5 VDC
	+15 VDC
	-15 VDC
SCAN DRIVE	+5 VDC
	+15 VDC
	-15 VDC
PLO	+15 VDC
	-15 VDC
	+15 VDC
	-15 VDC
RECEIVER	+8 VDC
MIXER/IF AMPLIFIER A1-1	+10 VDC
A1-2	+10 VDC
LO CHANNEL 6	+10 VDC
7	+10 VDC
SPARE	
LO CHANNEL 3	+10 VDC
4	+10 VDC
5	+10 VDC
8	+10 VDC
15	+15 VDC

QUIET BUS CURRENT	22014
A1-1 NOISY POWER BUS CURRENT	16294
A1-2 NOISY POWER BUS CURRENT	99
	76

MA/VOLTS	22060
	21827
	21797
	22151
	22109
	21849
	22568
	22075
	21819
	21418
	21431
	21395
	21439
	32767
	21247
	21180
	21392
	21313
	22014
	16294
	99
	76

	5.0
	15.1
	-14.9
	5.0
	15.0
	-15.0
	14.9
	-15.1
	8.0
	10.1
	10.0
	10.0
	10.0
	323.7
	10.1
	10.1
	10.1
	10.1
	15.0
	2237.2
	10.5
	9.9

## PRT TEMPERATURES

## VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

## FIXED TARGET

## BASEPLATE

## THERMOCOUPLE TEMPERATURES

## FIXED TARGET SHROUD

## VARIABLE TARGET SHROUD

## FIXED TARGET N2

## VARIABLE TARGET N2

## HEATER N2

FIXED TARGET FLOW METER  
VARIABLE TARGET FLOW METER  
BASEPLATE HEATER N2  
BASEPLATE N2  
BASEPLATE FLOW METER  
ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00



AMSU-A1-1 MOTOR - BEAM POINTING POSITIONS FOR INFO ONLY

Position	Relative Differential Position	Relative Position	Binary Weights																4X	HEX Values	Decimal Printout
NADIR	0	336	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0540	336
1	2200	-1856	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	E300	14520
2	152	-1704	1	1	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	E560	14672
3	152	-1552	1	1	1	0	0	1	1	1	1	1	0	0	0	0	0	0	0	E7C0	14824
4	151	-1401	1	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	EA1C	14975
5	152	-1249	1	1	1	0	1	1	0	0	0	0	1	1	1	1	1	0	0	EC7C	15127
6	152	-1097	1	1	1	0	1	1	1	0	1	0	1	1	0	1	1	0	0	EEDC	15279
7	151	-946	1	1	1	1	0	0	0	1	0	0	1	1	0	1	1	0	0	F138	15430
8	152	-794	1	1	1	1	0	0	1	1	1	1	0	0	1	1	1	0	0	F398	15582
9	152	-642	1	1	1	1	0	1	1	0	1	1	1	0	0	1	1	0	0	F5F8	15734
10	151	-491	1	1	1	1	0	1	0	1	0	1	1	1	1	1	0	0	0	F854	15885
11	152	-339	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	0	0	FAB4	16037
12	152	-187	1	1	1	1	1	1	0	1	1	0	0	0	1	0	1	0	0	FD14	16189
13	151	-36	1	1	1	1	1	1	1	1	1	0	1	1	1	0	0	0	0	FF70	16340
14	152	116	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0	0	0	01D0	108
15	152	268	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0430	260
16	151	419	0	0	0	0	0	0	1	1	0	1	0	0	0	1	1	0	0	068C	411
17	152	571	0	0	0	0	1	0	0	0	0	1	1	1	0	1	1	0	0	08EC	563
18	152	723	0	0	0	0	1	0	1	1	0	1	0	0	0	1	1	0	0	0B4C	715
19	151	874	0	0	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0	0DA8	866
20	152	1026	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1008	1018
21	152	1178	0	0	0	1	0	0	1	0	0	0	0	1	1	0	0	0	0	1268	1170
22	151	1329	0	0	0	1	0	1	0	0	0	0	1	1	0	0	0	0	0	14C4	1321
23	152	1481	0	0	0	1	0	1	1	1	1	0	0	1	0	0	1	0	0	1724	1473
24	152	1633	0	0	0	1	1	0	0	1	1	0	0	0	0	0	1	0	0	1984	1625
25	151	1784	0	0	0	1	1	0	1	1	1	1	0	0	0	0	0	0	0	1BE0	1776
26	152	1936	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1E40	1928
27	152	2088	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	20A0	2080
28	151	2239	0	0	1	0	0	0	1	0	1	0	1	1	1	1	0	0	0	22FC	2231
29	152	2391	0	0	1	0	0	0	1	0	1	0	0	1	1	1	1	0	0	255C	2383
30	152	2543	0	0	1	0	0	1	1	1	1	1	0	1	1	1	1	0	0	27BC	2535
CC4	3490	3828	0	0	1	1	1	1	1	1	1	1	0	1	0	1	0	0	0	3BD0	3826
CC3	3641	3979	0	0	1	1	1	1	0	0	0	0	0	0	1	0	1	0	0	3E2C	3977
CC2	3717	4055	0	0	1	1	1	1	1	1	1	0	1	0	1	0	1	0	0	3F5C	4053
CC1	3793	4131	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	408C	4129
WC	8192	8530	1	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	8548	8528

# AMSU-A1-2 MOTOR - BEAM POINTING POSITIONS FOR INFO ONLY

AMSU-A1-2 MOTOR - BEAM POINTING POSITIONS																			
Position	Relative Differential Position	Relative Position	Binary Weights												4X	HEX Values	Decimal Printout		
			1	1	1	1	1	1	1	1	1	1	1	1					
NADIR	0	-16	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	FFC0	16368
1	2200	-2216	1	1	0	1	1	1	0	1	0	1	1	0	0	0	0	DD60	14168
2	152	-2064	1	1	0	1	1	1	1	1	1	1	0	0	0	0	0	DFC0	14320
3	152	-1912	1	1	1	0	0	1	0	0	1	0	0	0	0	0	0	E220	14472
4	151	-1761	1	1	1	0	0	1	0	0	1	0	0	1	1	1	0	E47C	14623
5	152	-1609	1	1	1	0	0	1	1	0	1	0	1	1	1	0	0	E6DC	14775
6	152	-1457	1	1	1	0	1	0	0	1	0	0	1	1	1	0	0	E93C	14927
7	151	-1306	1	1	1	0	1	0	1	1	1	0	0	1	1	0	0	EB98	15078
8	152	-1154	1	1	1	0	1	1	0	1	1	1	1	1	0	0	0	EDF8	15230
9	152	-1002	1	1	1	1	0	0	0	0	0	0	1	0	1	0	0	F058	15382
10	151	-851	1	1	1	1	0	0	1	0	1	0	1	0	1	0	0	F2B4	15533
11	152	-699	1	1	1	1	0	1	0	1	0	1	0	0	1	0	0	F514	15685
12	152	-547	1	1	1	1	0	1	1	1	1	0	1	1	0	1	0	F774	15837
13	151	-396	1	1	1	1	1	0	0	1	1	0	1	0	0	0	0	F9D0	15988
14	152	-244	1	1	1	1	1	0	0	1	1	0	1	0	0	0	0	FC30	16140
15	152	-92	1	1	1	1	1	1	0	0	1	0	0	1	0	0	0	FE90	16292
16	151	59	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	00EC	59
17	152	211	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	034C	211
18	152	363	0	0	0	0	0	0	1	1	0	1	0	0	1	0	0	05AC	363
19	151	514	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0808	514
20	152	666	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0A68	666
21	152	818	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	0CC8	818
22	151	969	0	0	0	0	1	1	0	0	1	0	0	0	1	0	0	0F24	969
23	152	1121	0	0	0	0	1	1	1	1	0	0	0	0	0	1	0	1184	1121
24	152	1273	0	0	0	1	0	0	0	1	1	0	0	0	0	1	0	13E4	1273
25	151	1424	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	1640	1424
26	152	1576	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	18A0	1576
27	152	1728	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	1B00	1728
28	151	1879	0	0	0	1	1	0	1	1	0	0	0	0	0	0	0	1D5C	1879
29	152	2031	0	0	0	1	1	1	0	1	0	1	0	1	1	1	0	1FBC	2031
30	152	2183	0	0	0	1	1	1	1	1	1	0	0	1	1	0	0	221C	2183
CC4	3490	3474	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	3648	3474
CC3	3641	3625	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	38A4	3625
CC2	3717	3701	0	0	1	1	1	0	0	0	0	0	0	0	0	1	0	39D4	3701
CC1	3793	3777	0	0	1	1	1	0	0	1	1	0	0	0	0	1	0	3B04	3777
WC	8192	8176	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	7FC0	8176

**TEST DATA SHEET NO. 11 (Sheet 1 of 5)**  
Science and Engineering Data Test (Cold Cal Mode) (Paragraph 3.3.5.3.3)

Step	Instrument Status	(Y)es / (N)o
1	Cold Cal Mode command received?	yes
2	ENGR OK message seen?	yes
3	Both reflectors positioned at cold cal position 1?	yes
6	Cold Cal Position 2 command received?	yes
7	ENGR OK message seen?	yes
8	Both reflectors positioned at cold cal position 2?	yes
11	Cold Cal Position 3 command received?	yes
12	ENGR OK message seen?	yes
13	Both reflectors positioned at cold cal position 3?	yes
16	Cold Cal Position 4 command received?	yes
17	ENGR OK message seen?	yes
18	Both reflectors positioned at cold cal position 4?	yes

Yes = Pass No = Fail

Step	Element	Description	Measured Value* (Binary)	Required Value (Binary)	(P)ass/(F)ail
4a	1-2	Packet ID		0000100100000011	Pass
4b	3-4	Packet Length		0000001010111111	Pass
4c	5-6	Unit Serial Number		0000001100000000	Pass
4d	7-8	Instrument Mode/ Status		1001101000001000	Pass
9a	7-8	Instrument Mode/ Status		1001101000101000	Pass
14a	7-8	Instrument Mode/ Status		1001101001001000	Pass
19a	7-8	Instrument Mode/ Status		1001101001101000	Pass

RADIOMETER SCENE DATA			
Step	Description	Required Counts	(P)ass/(F)ail
4f	Review All Scene Data	12500-20500	Pass

PRT TEMPERATURE DATA				
Step	Element	Description	Required	(P)ass/(F)ail
4g	1090-1178	Review All PRT Data**	10-40 degrees C	Pass
4g	1180	Temperature Sensor Reference	23244-26317 counts	Pass

\* Rewriting printout data on this data sheet is optional.  
\*\* Refer to Table IV for PRT Data Description

EOS/AMSU-A1 System P/N 1356008

Circle Test: 1<sup>st</sup> CPT

Final CPT

Shop Order: 560863

Sub CPT N/A

SN: 202

LPT N/A

Opn. 0580

*J. Sanford*  
Customer Representative

11-20-98  
Date

*Roger Channing*  
Test Systems Engineer

Quality Control



13 Nov 98

NOV 19 1998

Date



**TEST DATA SHEET NO. 11** (Sheet 2 of 5)  
Science and Engineering Data Test (Cold Cal Mode) (Paragraph 3.3.5.3.3)

STATUS				
Step	Description	Status*	Required Status	(P)ass/(F)ail
4h	Antenna in Full Scan Mode		NO	<i>Pass</i>
	Antenna in Warm Cal Mode		NO	
	Antenna in Cold Cal Mode		YES	
	Antenna in Nadir Mode		NO	
	Cold Cal Position LSB		ZERO	
	Cold Cal Position MSB		ZERO	
	PLO Redundancy		PLO #1	
	Scanner A1-1 Power		ON	
	Scanner A1-2 Power		ON	
	PLO #1 Lock		YES	
	PLO #2 Lock		OFF	
	ADC Latchup Flag		ONE	
9b	Cold Cal Position LSB		ONE	<i>Pass</i>
	Cold Cal Position MSB		ZERO	<i>Pass</i>
14b	Cold Cal Position LSB		ZERO	<i>Pass</i>
	Cold Cal Position MSB		ONE	<i>Pass</i>
19b	Cold Cal Position LSB		ONE	<i>Pass</i>
	Cold Cal Position MSB		ONE	<i>Pass</i>

\* Rewriting printout data on this data sheet is optional.

EOS/AMSU-A1 System P/N 1256008  
Circle Test: 1<sup>st</sup> CPT (Final CPT)

Shop Order: 560863 S/N: 202  
Sub CPT N/A LPT N/A

[Signature] 11-20-98  
Customer Representative Date

[Signature] 13 Nov 98  
Test Systems Engineer Date  
Quality Control 200 NOV 19 1998 Date

**TEST DATA SHEET NO. 11** (Sheet 3 of 5)  
Science and Engineering Data Test (Cold Cal Mode) (Paragraph 3.3.5.3.3)

REFLECTOR POSITIONS (Step 6e)						
BP	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
1-30		4129	Pass		3777	Pass
** Required counts from AE26002/1 TDS 5&6 +/- 5 counts for Cold Cal Position #1						

REFLECTOR POSITIONS (Step 14c)						
BP	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
1-30		4053	Pass		3701	Pass
** Required counts from AE26002/1 TDS 5&6 +/- 5 counts for Cold Cal Position #2						

REFLECTOR POSITIONS (Step 22c)						
BP	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
1-30		3977	Pass		3625	Pass
** Required counts from AE26002/1 TDS 5&6 +/- 5 counts for Cold Cal Position #3						

REFLECTOR POSITIONS (Step 30c)						
BP	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
1-30		3826	Pass		3474	Pass
** Required counts from AE26002/1 TDS 5&6 +/- 5 counts for Cold Cal Position #4						

\* Actual range (min to max) of counts from printout (Only beam positions 1-30).  
Rewriting counts on this data sheet is optional.

EOS/AMSU-A1 System P/N 1356908 Shop Order: 560863 S/N: 202  
Circle Test: 1<sup>st</sup> CPT Final CPT Sub CPT N/A LPT N/A

J. Sanford 11-20-98  
Customer Representative Date

oper. 0580  
Regel Rhoany 11/13/98  
Test Systems Engineer Date  
200  
Quality Control NOV 1 1998 Date

**TEST DATA SHEET NO. 11** (Sheet 4 of 5)  
Science and Engineering Data Test (Cold Cal Mode) (Paragraph 3.3.5.3.3)

REFLECTOR POSITIONS (Step 6e)						
Beam Position	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Actual Position (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
Cold Cal 1		4129	Pass		3777	Pass

\* Actual count from printout Cold Cal 1 beam position  
\*\* Required counts from AE26002/1 TDS  $6 \pm 5$  counts for Cold Cal 1

REFLECTOR POSITIONS (Step 14c)						
Beam Position	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Actual Position (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
Cold Cal 2		4053	Pass		3701	Pass

\* Actual count from printout Cold Cal 2 beam position  
\*\* Required counts from AE26002/1 TDS  $6 \pm 5$  counts for Cold Cal 2

REFLECTOR POSITIONS (Step 22c)						
Beam Position	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Actual Position (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
Cold Cal 3		3977	Pass		3625	Pass

\* Actual count from printout Cold Cal 3 beam position  
\*\* Required counts from AE26002/1 TDS  $6 \pm 5$  counts for Cold Cal 3

REFLECTOR POSITIONS (Step 30c)						
Beam Position	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Actual Position (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
Cold Cal 4		3826	Pass		3474	Pass

\* Actual count from printout Cold Cal 4 beam position  
\*\* Required counts from AE26002/1 TDS  $6 \pm 5$  counts for Cold Cal 4

EOS/AMSU-A1 System P/N 1356008 Shop Order: 560863 S/N: 202  
Circle Test: 1<sup>st</sup> CPT (Final CPT) Sub CPT N/A LPT N/A

*J. Sanford* 11-20-98  
Customer Representative Date

*Roger H. Henry* 13 Nov 98  
Test Systems Engineer Date  
200 NOV 19 1998  
Quality Control Date

**TEST DATA SHEET NO. 11 (Sheet 5 of 5)**  
Science and Engineering Data Test (Cold Cal Mode) (Paragraph 3.3.5.3.3)

ENGINEERING DATA				
Step	Description	Measured*	Required	(P)ass/(F)ail
4i	Signal Processor (+5 VDC)		+4 to +6 volts	Pass ↑
	Signal Processor (+15 VDC)		+14 to +16 volts	
	Signal Processor (-15 VDC)		-14 to -16 volts	
	Scan Drive (+5 VDC)		+4 to +6 volts	
	Scan Drive (+15 VDC)		+14 to +16 volts	
	Scan Drive (-15 VDC)		-14 to -16 volts	
	PLO (+15 VDC)		+14 to +16 volts	
	PLO (-15 VDC)		-14 to -16 volts	
	Receiver (+8 VDC)		+7 to +9 volts	
	Mixer/IF Amplifier A1-1 (+10 VDC)		+9 to +11 volts	
	Mixer/IF Amplifier A1-2 (+10 VDC)		+9 to +11 volts	
	LO Channel 6		+9 to +11 volts	
	LO Channel 7		+9 to +11 volts	
	LO Channel 3		+9 to +11 volts	
	LO Channel 4		+9 to +11 volts	
	LO Channel 5		+9 to +11 volts	
	LO Channel 8		+9 to +11 volts	
	LO Channel 15		+14 to +16 volts	
	Quiet Bus Current		≤ 3 Amps	
	A1-1 Noisy Bus Current		≤ 125 milliamps	Pass ↓
	A1-2 Noisy Bus Current		≤ 125 milliamps	

\* Rewriting printout data on this data sheet is optional.

EOS/AMSU-A1 System P/N 1356008 Shop Order: 560863 SN: 202  
Circle Test: 1<sup>st</sup> CPT Final CPT Sub CPT N/A LPT N/A

cpel.0580

Roger Khoury 13 Nov 98  
Test Systems Engineer (200) NOV 19 1998

J. England 11-20-98  
Customer Representative Date

Quality Control Date



EOS A1-03 E1.EXE;40 COLD CAL MODE  
 [ 5 ] SCIENCE DATA ELEMENT 0000  
 [ 6 ] CONTROL/STATUS ELEMENT 00  
 [ 7 ] ENGINEERING ELEMENT 00

P1 13-NOV-98 14:54:24

SCAN NUMBER 1176

# COMMANDS

[ 9 ]	SCANNER A1-1	POWER =	ON	PLLO#1 [ 15 ]
[ 10 ]	SCANNER A1-2	POWER =	ON	YES [ 16 ]
[ 11 ]	ANTENNA FULL	SCAN MODE =	NO	NO [ 17 ]
[ 12 ]	WARM CAL			NO [ 18 ]
[ 13 ]	COLD CAL			NO [ 19 ]
[ 14 ]	NADIR			[ 20 ]
ENGR OK	POWER	ON	CHECKSUM	[ 21 ]
SELECT BUTTON 3		SCREEN ONLY [ 2 ]	IN AACB CALC AACB SA28 1009 SA29 2018	[ 1 ] RETURN

Parag. 3.3.5.3.3 Step 3. Cold Cal position 1

Support TDS II of AE-26156/9

Final CPT - EOS AMSU-A1 S/N 202  
 S10 560863 Oper. 0580

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	NADIR SAMPLE	17
2		00000011	574		CH 8
3	PACKET LENGTH	00000010	576		CH 9
4		10111111	578		CH 10
5	UNIT SERIAL NUMBER	00000011	580		CH 11
6		00000000	582		CH 12
7	INSTRUMENT MODE/STATUS	10011010	584		CH 13
8		00001000	586		CH 14
10	REFLECTOR 1 POSITION	4129	588	REFLECTOR 1 POSITION	18
12	REFLECTOR 2 POSITION	3779	590	REFLECTOR 2 POSITION	18
14	REFL 1 POS	4129	592	REFL 1 POS	18
16	REFL 2 POS	3779	594	REFL 2 POS	18
18	NADIR SAMPLE	15910	596	NADIR SAMPLE	18
20		16425	598		CH 3
22		15603	600		CH 4
24		17171	602		CH 5
26		15593	604		CH 6
28		16584	606		CH 7
30		16388	608		CH 8
32		16577	610		CH 9
34		17676	612		CH 10
36		17820	614		CH 11
38		17728	616		CH 12
40		19444	618		CH 13
42		16511	620		CH 14
44	REFLECTOR 1 POSITION	4129	622	REFLECTOR 1 POSITION	19
46	REFLECTOR 2 POSITION	3780	624	REFLECTOR 2 POSITION	19
48	REFL 1 POS	4129	626	REFL 1 POS	19
50	REFL 2 POS	3779	628	REFL 2 POS	19
52	NADIR SAMPLE	15913	630	NADIR SAMPLE	19
54		16428	632		CH 3
56		15608	634		CH 4
58		17173	636		CH 5
60		15594	638		CH 6
62		16588	640		CH 7
64		16385	642		CH 8
66		16577	644		CH 9
68		17678	646		CH 10
70		17823	648		CH 11
72		17737	650		CH 12
74		19454	652		CH 13
76		16514	654		CH 14
78	REFLECTOR 1 POSITION	4129	656	REFLECTOR 1 POSITION	20
80	REFLECTOR 2 POSITION	3780	658	REFLECTOR 2 POSITION	20
82	REFL 1 POS	4129	660	REFL 1 POS	20
84	REFL 2 POS	3779	662	REFL 2 POS	20
86	NADIR SAMPLE	15911	664	NADIR SAMPLE	20
88		16429	666		CH 3
90		15608	668		CH 4
92		17172	670		CH 5
					CH 6

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15594	672	CH 7	15591
96	CH 8	16590	674	CH 8	16591
98	CH 9	16387	676	CH 9	16381
100	CH 10	16582	678	CH 10	16574
102	CH 11	17675	680	CH 11	17675
104	CH 12	17830	682	CH 12	17829
106	CH 13	17727	684	CH 13	17726
108	CH 14	19460	686	CH 14	19471
110	CH 15	16512	688	CH 15	16514
112	REFLECTOR 1 POSITION 4	4129	690	REFLECTOR 1 POSITION 21	4129
114	REFLECTOR 2 POSITION 4	3779	692	REFLECTOR 2 POSITION 21	3779
116	REFL 1 POS 4 2ND LOOK	4129	694	REFL 1 POS 21 2ND LOOK	4129
118	REFL 2 POS 4 2ND LOOK	3779	696	REFL 2 POS 21 2ND LOOK	3779
120	NADIR SAMPLE 4	15910	698	NADIR SAMPLE 21	15908
122	CH 3	16429	700	CH 3	16427
124	CH 4	15606	702	CH 4	15606
126	CH 5	17170	704	CH 5	17169
128	CH 6	15592	706	CH 6	15593
130	CH 7	16589	708	CH 7	16588
132	CH 8	16384	710	CH 8	16388
134	CH 9	16573	712	CH 9	16574
136	CH 10	17674	714	CH 10	17676
138	CH 11	17822	716	CH 11	17832
140	CH 12	17752	718	CH 12	17736
142	CH 13	19476	720	CH 13	19462
144	CH 14	16511	722	CH 14	16513
146	CH 15	4129	724	CH 15	4129
148	REFLECTOR 1 POSITION 5	3779	726	REFLECTOR 1 POSITION 22	3780
150	REFLECTOR 2 POSITION 5	4129	728	REFLECTOR 2 POSITION 22	4129
152	REFL 1 POS 5 2ND LOOK	3780	730	REFL 1 POS 22 2ND LOOK	3779
154	REFL 2 POS 5 2ND LOOK	15911	732	REFL 2 POS 22 2ND LOOK	15911
156	NADIR SAMPLE 5	16430	734	NADIR SAMPLE 22	16427
158	CH 3	15605	736	CH 3	15603
160	CH 4	17172	738	CH 4	17170
162	CH 5	15589	740	CH 5	15593
164	CH 6	16590	742	CH 6	16587
166	CH 7	16387	744	CH 7	16385
168	CH 8	16583	746	CH 8	16584
170	CH 9	17677	748	CH 9	17676
172	CH 10	17832	750	CH 10	17830
174	CH 11	17744	752	CH 11	17736
176	CH 12	19464	754	CH 12	19444
178	CH 13	16514	756	CH 13	16513
180	CH 14	4129	758	CH 14	4129
182	CH 15	3779	760	CH 15	3779
184	REFLECTOR 1 POSITION 6	4129	762	REFLECTOR 1 POSITION 23	4129
186	REFLECTOR 2 POSITION 6	3780	764	REFLECTOR 2 POSITION 23	3779
188	REFL 1 POS 6 2ND LOOK	15912	766	REFL 1 POS 23 2ND LOOK	15912
190	REFL 2 POS 6 2ND LOOK	16429	768	REFL 2 POS 23 2ND LOOK	16428
192	NADIR SAMPLE 6	15604	770	NADIR SAMPLE 23	15606

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17170	772	CH 6	17172
196	CH 7	15596	774	CH 7	15590
198	CH 8	16590	776	CH 8	16589
200	CH 9	16385	778	CH 9	16389
202	CH 10	16579	780	CH 10	16578
204	CH 11	17673	782	CH 11	17683
206	CH 12	17828	784	CH 12	17822
208	CH 13	17725	786	CH 13	17742
210	CH 14	19444	788	CH 14	19458
212	CH 15	16513	790	CH 15	16513
214	REFLECTOR 1 POSITION 7	4129	792	REFLECTOR 1 POSITION 24	4129
216	REFLECTOR 2 POSITION 7	3779	794	REFLECTOR 2 POSITION 24	3779
218	REFL 1 POS 7 2ND LOOK	4129	796	REFL 1 POS 24 2ND LOOK	4129
220	REFL 2 POS 7 2ND LOOK	3780	798	REFL 2 POS 24 2ND LOOK	3779
222	NADIR SAMPLE 7	15908	800	NADIR SAMPLE 24	15911
224	CH 3	16427	802	CH 3	16432
226	CH 4	15609	804	CH 4	15605
228	CH 5	17175	806	CH 5	17171
230	CH 6	15594	808	CH 6	15591
232	CH 7	16589	810	CH 7	16588
234	CH 8	16386	812	CH 8	16383
236	CH 9	16578	814	CH 9	16582
238	CH 10	17680	816	CH 10	17678
240	CH 11	17822	818	CH 11	17826
242	CH 12	17732	820	CH 12	17733
244	CH 13	19458	822	CH 13	19454
246	CH 14	16513	824	CH 14	16511
248	CH 15	4129	826	CH 15	4129
250	REFLECTOR 1 POSITION 8	3779	828	REFLECTOR 1 POSITION 25	3780
252	REFLECTOR 2 POSITION 8	4129	830	REFLECTOR 2 POSITION 25	4129
254	REFL 1 POS 8 2ND LOOK	3780	832	REFL 1 POS 25 2ND LOOK	3779
256	REFL 2 POS 8 2ND LOOK	15915	834	REFL 2 POS 25 2ND LOOK	15911
258	NADIR SAMPLE 8	16426	836	NADIR SAMPLE 25	16429
260	CH 3	15603	838	CH 3	15606
262	CH 4	17167	840	CH 4	17169
264	CH 5	15592	842	CH 5	15592
266	CH 6	16590	844	CH 6	16586
268	CH 7	16387	846	CH 7	16388
270	CH 8	16580	848	CH 8	16579
272	CH 9	17672	850	CH 9	17674
274	CH 10	17829	852	CH 10	17833
276	CH 11	17744	854	CH 11	17734
278	CH 12	19438	856	CH 12	19475
280	CH 13	16512	858	CH 13	16513
282	CH 14	4129	860	CH 14	4129
284	CH 15	3779	862	CH 15	3779
286	REFLECTOR 1 POSITION 9	3779	864	REFLECTOR 1 POSITION 26	4129
288	REFLECTOR 2 POSITION 9	4129	866	REFLECTOR 2 POSITION 26	3779
290	REFL 1 POS 9 2ND LOOK	3780	868	REFL 1 POS 26 2ND LOOK	15910
292	REFL 2 POS 9 2ND LOOK	15908	870	REFL 2 POS 26 2ND LOOK	16424
	NADIR SAMPLE 9	16431		NADIR SAMPLE 26	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15602	872		15605
296	CH 6	17170	874		17167
298	CH 7	15593	876		15596
300	CH 8	16590	878		16591
302	CH 9	16387	880		16385
304	CH 10	16578	882		16576
306	CH 11	17675	884		17682
308	CH 12	17829	886		17827
310	CH 13	17736	888		17734
312	CH 14	19458	890		19452
314	CH 15	16513	892		16513
316	REFLECTOR 1 POSITION 10	4129	894	REFLECTOR 1 POSITION 27	4129
318	REFLECTOR 2 POSITION 10	3779	896	REFLECTOR 2 POSITION 27	3779
320	REFL 1 POS 10 2ND LOOK	4129	898	REFL 1 POS 27 2ND LOOK	4129
322	REFL 2 POS 10 2ND LOOK	3780	900	REFL 2 POS 27 2ND LOOK	3780
324	NADIR SAMPLE 10	15915	902	NADIR SAMPLE 27	15910
326	CH 3	16428	904	CH 3	16428
328	CH 4	15605	906	CH 4	15603
330	CH 5	17169	908	CH 5	17167
332	CH 6	15596	910	CH 6	15592
334	CH 7	16588	912	CH 7	16588
336	CH 8	16388	914	CH 8	16385
338	CH 9	16583	916	CH 9	16577
340	CH 10	17677	918	CH 10	17675
342	CH 11	17831	920	CH 11	17823
344	CH 12	17733	922	CH 12	17735
346	CH 13	19448	924	CH 13	19478
348	CH 14	16512	926	CH 14	16512
350	CH 15	4129	928	CH 15	4129
352	REFLECTOR 1 POSITION 11	3779	930	REFLECTOR 1 POSITION 28	3779
354	REFLECTOR 2 POSITION 11	4129	932	REFLECTOR 2 POSITION 28	4129
356	REFL 1 POS 11 2ND LOOK	3780	934	REFL 1 POS 28 2ND LOOK	3780
358	REFL 2 POS 11 2ND LOOK	15914	936	REFL 2 POS 28 2ND LOOK	15910
360	NADIR SAMPLE 11	16428	938	NADIR SAMPLE 28	16426
362	CH 3	15607	940	CH 3	15603
364	CH 4	17169	942	CH 4	17175
366	CH 5	15591	944	CH 5	15594
368	CH 6	16588	946	CH 6	16585
370	CH 7	16386	948	CH 7	16387
372	CH 8	16577	950	CH 8	16576
374	CH 9	17674	952	CH 9	17679
376	CH 10	17828	954	CH 10	17833
378	CH 11	17738	956	CH 11	17723
380	CH 12	19457	958	CH 12	19432
382	CH 13	16514	960	CH 13	16512
384	CH 14	4129	962	CH 14	4129
386	CH 15	3780	964	CH 15	3779
388	REFLECTOR 1 POSITION 12	4129	966	REFLECTOR 1 POSITION 29	4129
390	REFLECTOR 2 POSITION 12	3779	968	REFLECTOR 2 POSITION 29	3780
392	REFL 1 POS 12 2ND LOOK	15907	970	REFL 1 POS 29 2ND LOOK	15913
	REFL 2 POS 12 2ND LOOK			REFL 2 POS 29 2ND LOOK	
	NADIR SAMPLE 12			NADIR SAMPLE 29	
	CH 3			CH 3	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16428	972	CH 4	16429
396	CH 5	15605	974	CH 5	15606
398	CH 6	17172	976	CH 6	17170
400	CH 7	15595	978	CH 7	15591
402	CH 8	16587	980	CH 8	16588
404	CH 9	16383	982	CH 9	16387
406	CH 10	16584	984	CH 10	16581
408	CH 11	17684	986	CH 11	17671
410	CH 12	17821	988	CH 12	17837
412	CH 13	17731	990	CH 13	17732
414	CH 14	19456	992	CH 14	19453
416	CH 15	16514	994	CH 15	16513
418	REFLECTOR 1 POSITION 13	4129	996	REFLECTOR 1 POSITION 30	4129
420	REFLECTOR 2 POSITION 13	3779	998	REFLECTOR 2 POSITION 30	3779
422	REFL 1 POS 13 2ND LOOK	4129	1000	REFL 1 POS 30 2ND LOOK	4129
424	REFL 2 POS 13 2ND LOOK	3779	1002	REFL 2 POS 30 2ND LOOK	3780
426	NADIR SAMPLE 13	15908	1004	NADIR SAMPLE 30	15914
428	CH 4	16429	1006	CH 4	16429
430	CH 5	15606	1008	CH 5	15606
432	CH 6	17170	1010	CH 6	17170
434	CH 7	15591	1012	CH 7	15592
436	CH 8	16591	1014	CH 8	16586
438	CH 9	16383	1016	CH 9	16386
440	CH 10	16575	1018	CH 10	16576
442	CH 11	17669	1020	CH 11	17676
444	CH 12	17833	1022	CH 12	17835
446	CH 13	17741	1024	CH 13	17736
448	CH 14	19467	1026	CH 14	19465
450	CH 15	16512	1028	CH 15	16511
452	REFLECTOR 1 POSITION 14	4129	1030	REFLECTOR 1 COLD CAL POS	OE
454	REFLECTOR 2 POSITION 14	3780	1032	REFLECTOR 2 COLD CAL POS	OE
456	REFL 1 POS 14 2ND LOOK	4129	1034	REFL 1 COLD CAL 2ND LOOK	OE
458	REFL 2 POS 14 2ND LOOK	3779	1036	REFL 2 COLD CAL 2ND LOOK	OE
460	NADIR SAMPLE 14	15909	1038	COLD CAL DATA 1	0
462	CH 4	16428	1040	CH 4	0
464	CH 5	15605	1042	CH 5	0
466	CH 6	17170	1044	CH 6	0
468	CH 7	15592	1046	CH 7	0
470	CH 8	16588	1048	CH 8	0
472	CH 9	16384	1050	CH 9	0
474	CH 10	16586	1052	CH 10	0
476	CH 11	17672	1054	CH 11	0
478	CH 12	17828	1056	CH 12	0
480	CH 13	17732	1058	CH 13	0
482	CH 14	19457	1060	CH 14	0
484	CH 15	16512	1062	CH 15	0
486	REFLECTOR 1 POSITION 15	4129	1064	COLD CAL DATA 2	0
488	REFLECTOR 2 POSITION 15	3779	1066	CH 3	0
490	REFL 1 POS 15 2ND LOOK	4129	1068	CH 4	0
492	REFL 2 POS 15 2ND LOOK	3779	1070	CH 5	0
				CH 6	0



EOS A1\_03 E1.EXE;40 SCIENCE DATA  
NADIR MODE

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE	DEG C
1090	SCAN MOTOR A1-1	18266	23.43	
1092	SCAN MOTOR A1-2	19659	25.38	
1094	FEED HORN A1-1	20571	28.16	
1096	FEED HORN A1-2	21788	30.54	
1098	RF MUX A1-1	22685	32.08	
1100	RF MUX A1-2	24060	34.87	
1102	LOCAL OSCILLATOR CHANNEL 3	24996	36.90	
1104	LOCAL OSCILLATOR CHANNEL 4	25404	37.01	
1106	LOCAL OSCILLATOR CHANNEL 5	24243	35.40	
1108	LOCAL OSCILLATOR CHANNEL 6	22949	31.96	
1110	LOCAL OSCILLATOR CHANNEL 7	23405	33.57	
1112	LOCAL OSCILLATOR CHANNEL 8	24798	36.32	
1114	LOCAL OSCILLATOR CHANNEL 15	24480	35.26	
1116	PLLO #2	22684	32.10	
1118	PLLO #1	25604	37.81	
1120	1553 INTERFACE	18630	37.27	
1122	MIXER/IF AMPLIFIER CHANNEL 3	24369	35.43	
1124	MIXER/IF AMPLIFIER CHANNEL 4	24526	35.22	
1126	MIXER/IF AMPLIFIER CHANNEL 5	24128	34.85	
1128	MIXER/IF AMPLIFIER CHANNEL 6	22986	32.65	
1130	MIXER/IF AMPLIFIER CHANNEL 7	23004	33.24	
1132	MIXER/IF AMPLIFIER CHANNEL 8	24453	35.43	
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	22452	31.85	
1136	MIXER/IF AMPLIFIER CHANNEL 15	24235	35.31	
1138	MIXER/IF AMPLIFIER CHANNEL 11 THRU 14	23991	34.63	
1140	IF AMPLIFIER CHANNEL 9	24173	34.89	
1142	IF AMPLIFIER CHANNEL 10	24022	34.86	
1144	IF AMPLIFIER CHANNEL 11	23154	32.33	
1146	DC/DC CONVERTER	25609	37.10	
1148	IF AMPLIFIER CHANNEL 13	22739	31.64	
1150	IF AMPLIFIER CHANNEL 14	23098	32.78	
1152	IF AMPLIFIER CHANNEL 12	22904	32.19	
1154	RF SHELF A1-1	23434	33.50	
1156	RF SHELF A1-2	24137	34.24	
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	21077	28.98	
1160	A1-1 WARM LOAD 1	23814	24.62	
1162	A1-1 WARM LOAD 2	24313	24.74	
1164	A1-1 WARM LOAD 3	23808	24.76	
1166	A1-1 WARM LOAD 4	23886	24.73	
1168	A1-1 WARM LOAD CENTER	24080	24.74	
1170	A1-2 WARM LOAD 1	25192	26.81	
1172	A1-2 WARM LOAD 2	25246	26.82	
1174	A1-2 WARM LOAD 3	25257	26.82	
1176	A1-2 WARM LOAD 4	25247	26.70	
1178	A1-2 WARM LOAD CENTER	25260	26.81	
1180	TEMP SENSOR REFERENCE VOLTAGE	25271		





AZONIX DATA  
NADIR MODE

PRT TEMPERATURES

VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

FIXED TARGET

BASEPLATE

THERMOCOUPLE TEMPERATURES

FIXED TARGET SHROUD

VARIABLE TARGET SHROUD

FIXED TARGET N2

VARIABLE TARGET N2

HEATER N2

FIXED TARGET FLOW METER  
VARIABLE TARGET FLOW METER  
BASEPLATE HEATER N2  
BASEPLATE N2  
BASEPLATE FLOW METER  
ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00

EOS A1-03 E1.EXE/40 COLD CAL MODE  
 [ 5 ] SCIENCE DATA ELEMENT 0000 P1 13-NOV-98 15:03:21 SCAN NUMBER 1243  
 [ 6 ] CONTROL/STATUS ELEMENT 00  
 [ 7 ] ENGINEERING ELEMENT 00

COMMANDS

[ 9 ] SCANNER A1-1 POWER = ON PLO POWER = PLO#1 [ 15 ]  
 [ 10 ] SCANNER A1-2 POWER = ON COLD CAL POSITION 1 = YES [ 16 ]  
 [ 11 ] ANTENNA FULL SCAN MODE = NO 2 = NO [ 17 ]  
 [ 12 ] WARM CAL 3 = NO [ 18 ]  
 [ 13 ] COLD CAL = YES COLD CAL POSITION 4 = NO [ 19 ]  
 [ 14 ] NADIR = NO RESET C&DH PROCESSOR [ 20 ]  
 ENGR OK POWER ON CHECKSUM IN 9EDB CALC 9EDB SA28 1077 SA29 2153  
 SELECT BUTTON 3 SCREEN ONLY [ 2 ] PRINT [ 3 ] FULL [ 1 ] RETURN [ 21 ]

Parag. 3.3.5.3.3 Step 6 Cold Cal Mode  
 Support TDS 11 of AE-26/56/9  
 Final CPT - EOS AMSU-A1 S/N 202  
 S/W 560863 oper, 0580

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	NADIR SAMPLE	16580
2		00000011	574		16383
3	PACKET LENGTH	00000010	576		16571
4		10111111	578		17661
5	UNIT SERIAL NUMBER	00000011	580		17815
6		00000000	582		17713
7	INSTRUMENT MODE/STATUS	10011010	584		19441
8		00001000	586		16509
10	REFLECTOR 1 POSITION	4129	588	REFLECTOR 1 POSITION	4129
12	REFLECTOR 2 POSITION	3779	590	REFLECTOR 2 POSITION	3779
14	REFL 1 POS 1 2ND LOOK	4129	592	REFL 1 POS 18 2ND LOOK	4129
16	REFL 2 POS 1 2ND LOOK	3779	594	REFL 2 POS 18 2ND LOOK	3779
18	NADIR SAMPLE	15913	596	NADIR SAMPLE	15906
20		16417	598		16417
22		15595	600		15597
24		17166	602		17164
26		15591	604		15589
28		16581	606		16583
30		16377	608		16382
32		16578	610		16573
34		17662	612		17661
36		17807	614		17811
38		17722	616		17714
40		19453	618		19430
42		16507	620		16507
44	REFLECTOR 1 POSITION	4129	622	REFLECTOR 1 POSITION	4129
46	REFLECTOR 2 POSITION	3779	624	REFLECTOR 2 POSITION	3779
48	REFL 1 POS 2 2ND LOOK	4129	626	REFL 1 POS 19 2ND LOOK	4129
50	REFL 2 POS 2 2ND LOOK	3779	628	REFL 2 POS 19 2ND LOOK	3779
52	NADIR SAMPLE	15914	630	NADIR SAMPLE	15913
54		16422	632		16419
56		15598	634		15599
58		17165	636		17160
60		15592	638		15587
62		16583	640		16579
64		16384	642		16384
66		16573	644		16577
68		17656	646		17663
70		17815	648		17813
72		17714	650		17705
74		19428	652		19440
76		16508	654		16508
78	REFLECTOR 1 POSITION	4129	656	REFLECTOR 1 POSITION	4129
80	REFLECTOR 2 POSITION	3779	658	REFLECTOR 2 POSITION	3779
82	REFL 1 POS 3 2ND LOOK	4129	660	REFL 1 POS 20 2ND LOOK	4129
84	REFL 2 POS 3 2ND LOOK	3779	662	REFL 2 POS 20 2ND LOOK	3779
86	NADIR SAMPLE	15914	664	NADIR SAMPLE	15911
88		16418	666		16418
90		15599	668		15597
92		17168	670		17166

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15587	672	CH 7	15590
96	CH 8	16583	674	CH 8	16578
98	CH 9	16380	676	CH 9	16384
100	CH 10	16576	678	CH 10	16578
102	CH 11	17657	680	CH 11	17662
104	CH 12	17816	682	CH 12	17813
106	CH 13	17707	684	CH 13	17712
108	CH 14	19438	686	CH 14	17712
110	CH 15	16507	688	CH 15	19420
112	REFLECTOR 1 POSITION 4	4129	690	REFLECTOR 1 POSITION 21	16507
114	REFLECTOR 2 POSITION 4	3779	692	REFLECTOR 2 POSITION 21	4129
116	REFL 1 POS 4 2ND LOOK	4129	694	REFL 1 POS 21 2ND LOOK	3779
118	REFL 2 POS 4 2ND LOOK	3779	696	REFL 2 POS 21 2ND LOOK	4129
120	NADIR SAMPLE 4	15917	698	NADIR SAMPLE 21	3779
122	CH 3	16417	700	CH 3	15916
124	CH 4	15595	702	CH 4	16418
126	CH 5	17165	704	CH 5	15599
128	CH 6	15588	706	CH 6	17164
130	CH 7	16582	708	CH 7	15591
132	CH 8	16381	710	CH 8	16579
134	CH 9	16574	712	CH 9	16382
136	CH 10	17658	714	CH 10	16577
138	CH 11	17806	716	CH 11	17663
140	CH 12	17715	718	CH 12	17811
142	CH 13	19446	720	CH 13	17712
144	CH 14	16508	722	CH 14	19427
146	CH 15	4129	724	CH 15	16508
148	REFLECTOR 1 POSITION 5	3779	726	REFLECTOR 1 POSITION 22	4129
150	REFLECTOR 2 POSITION 5	4129	728	REFLECTOR 2 POSITION 22	3779
152	REFL 1 POS 5 2ND LOOK	3779	730	REFL 1 POS 22 2ND LOOK	4129
154	REFL 2 POS 5 2ND LOOK	15913	732	REFL 2 POS 22 2ND LOOK	3779
156	NADIR SAMPLE 5	16418	734	NADIR SAMPLE 22	15910
158	CH 3	15600	736	CH 3	16417
160	CH 4	17164	738	CH 4	15598
162	CH 5	15592	740	CH 5	17166
164	CH 6	16583	742	CH 6	15588
166	CH 7	16380	744	CH 7	16581
168	CH 8	16575	746	CH 8	16384
170	CH 9	17655	748	CH 9	16577
172	CH 10	17809	750	CH 10	17664
174	CH 11	17715	752	CH 11	17807
176	CH 12	19426	754	CH 12	17717
178	CH 13	16507	756	CH 13	19426
180	CH 14	4129	758	CH 14	16508
182	CH 15	3779	760	CH 15	4129
184	REFLECTOR 1 POSITION 6	3779	762	REFLECTOR 1 POSITION 23	3779
186	REFLECTOR 2 POSITION 6	4129	764	REFLECTOR 2 POSITION 23	4129
188	REFL 1 POS 6 2ND LOOK	3779	766	REFL 1 POS 23 2ND LOOK	3779
190	REFL 2 POS 6 2ND LOOK	15909	768	REFL 2 POS 23 2ND LOOK	15913
192	NADIR SAMPLE 6	16420	770	NADIR SAMPLE 23	16421
	CH 3	15599		CH 3	15597
	CH 4			CH 4	
	CH 5			CH 5	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17165	772	CH 6	17166
196	CH 7	15591	774	CH 7	15588
198	CH 8	16583	776	CH 8	16578
200	CH 9	16384	778	CH 9	16384
202	CH 10	16577	780	CH 10	16570
204	CH 11	17659	782	CH 11	17668
206	CH 12	17813	784	CH 12	17813
208	CH 13	17709	786	CH 13	17722
210	CH 14	19440	788	CH 14	19441
212	CH 15	16507	790	CH 15	16508
214	REFLECTOR 1 POSITION 7	4129	792	REFLECTOR 1 POSITION 24	4129
216	REFLECTOR 2 POSITION 7	3779	794	REFLECTOR 2 POSITION 24	3779
218	REFL 1 POS 7 2ND LOOK	4129	796	REFL 1 POS 24 2ND LOOK	4129
220	REFL 2 POS 7 2ND LOOK	3779	798	REFL 2 POS 24 2ND LOOK	3779
222	NADIR SAMPLE 7	15914	800	NADIR SAMPLE 24	15909
224	CH 3	16414	802	CH 3	16421
226	CH 4	15598	804	CH 4	15599
228	CH 5	17160	806	CH 5	17165
230	CH 6	15589	808	CH 6	15588
232	CH 7	16581	810	CH 7	16577
234	CH 8	16382	812	CH 8	16382
236	CH 9	16572	814	CH 9	16573
238	CH 10	17662	816	CH 10	17658
240	CH 11	17814	818	CH 11	17813
242	CH 12	17704	820	CH 12	17705
244	CH 13	19451	822	CH 13	19426
246	CH 14	16508	824	CH 14	16507
248	CH 15	4129	826	CH 15	4129
250	REFLECTOR 1 POSITION 8	3779	828	REFLECTOR 1 POSITION 25	3779
252	REFLECTOR 2 POSITION 8	4129	830	REFLECTOR 2 POSITION 25	4129
254	REFL 1 POS 8 2ND LOOK	3779	832	REFL 1 POS 25 2ND LOOK	3779
256	REFL 2 POS 8 2ND LOOK	15910	834	REFL 2 POS 25 2ND LOOK	15913
258	NADIR SAMPLE 8	16413	836	NADIR SAMPLE 25	16419
260	CH 3	15598	838	CH 3	15596
262	CH 4	17167	840	CH 4	17171
264	CH 5	15589	842	CH 5	15586
266	CH 6	16582	844	CH 6	16582
268	CH 7	16381	846	CH 7	16385
270	CH 8	16574	848	CH 8	16576
272	CH 9	17661	850	CH 9	17666
274	CH 10	17807	852	CH 10	17800
276	CH 11	17704	854	CH 11	17708
278	CH 12	19435	856	CH 12	19404
280	CH 13	16506	858	CH 13	16507
282	CH 14	4129	860	CH 14	4129
284	CH 15	3779	862	CH 15	3779
286	REFLECTOR 1 POSITION 9	4129	864	REFLECTOR 1 POSITION 26	4129
288	REFLECTOR 2 POSITION 9	3779	866	REFLECTOR 2 POSITION 26	3779
290	REFL 1 POS 9 2ND LOOK	15914	868	REFL 1 POS 26 2ND LOOK	15913
292	REFL 2 POS 9 2ND LOOK	16420	870	REFL 2 POS 26 2ND LOOK	16417
	NADIR SAMPLE 9			NADIR SAMPLE 26	
	CH 3			CH 3	
	CH 4			CH 4	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15598	872	REFLECTOR 1 POSITION 27	15909
296	CH 6	17167	874	REFLECTOR 2 POSITION 27	16417
298	CH 7	15592	876	REFLECTOR 2 POSITION 27	15598
300	CH 8	16584	878	REFL 1 POS 27 2ND LOOK	17166
302	CH 9	16384	880	REFL 2 POS 27 2ND LOOK	15590
304	CH 10	16576	882	NADIR SAMPLE 27	16577
306	CH 11	17656	884	CH 3	16385
308	CH 12	17801	886	CH 4	16575
310	CH 13	17707	888	CH 5	17669
312	CH 14	19420	890	CH 6	17808
314	CH 15	16509	892	CH 7	17707
316	REFLECTOR 1 POSITION 10	4129	894	CH 8	19428
318	REFLECTOR 2 POSITION 10	3779	896	CH 9	16508
320	REFL 1 POS 10 2ND LOOK	4129	898	CH 10	4129
322	REFL 2 POS 10 2ND LOOK	3779	900	CH 11	3779
324	NADIR SAMPLE 10	15911	902	CH 12	4129
326	CH 3	16416	904	CH 13	3779
328	CH 4	15599	906	CH 14	15909
330	CH 5	17167	908	CH 15	16417
332	CH 6	15590	910	REFLECTOR 1 POSITION 28	15598
334	CH 7	16582	912	REFLECTOR 2 POSITION 28	17166
336	CH 8	16384	914	REFL 1 POS 28 2ND LOOK	15590
338	CH 9	16571	916	REFL 2 POS 28 2ND LOOK	16577
340	CH 10	17664	918	NADIR SAMPLE 28	16385
342	CH 11	17811	920	CH 3	16575
344	CH 12	17711	922	CH 4	17669
346	CH 13	19445	924	CH 5	17808
348	CH 14	16508	926	CH 6	17707
350	CH 15	4129	928	CH 7	19428
352	REFLECTOR 1 POSITION 11	3779	930	CH 8	16508
354	REFLECTOR 2 POSITION 11	4129	932	CH 9	4129
356	REFL 1 POS 11 2ND LOOK	4129	934	CH 10	3779
358	REFL 2 POS 11 2ND LOOK	3779	936	CH 11	4129
360	NADIR SAMPLE 11	15913	938	CH 12	3779
362	CH 3	16417	940	CH 13	15910
364	CH 4	15593	942	CH 14	16419
366	CH 5	17166	944	CH 15	15596
368	CH 6	15590	946	REFLECTOR 1 POSITION 29	17167
370	CH 7	16584	948	REFLECTOR 2 POSITION 29	15594
372	CH 8	16379	950	REFL 1 POS 29 2ND LOOK	16583
374	CH 9	16572	952	REFL 2 POS 29 2ND LOOK	16383
376	CH 10	17663	954	NADIR SAMPLE 29	16576
378	CH 11	17810	956	CH 3	17658
380	CH 12	17708	958	CH 4	17812
382	CH 13	19431	960	CH 5	17704
384	CH 14	16509	962	CH 6	19443
386	CH 15	4129	964	CH 7	16506
388	REFLECTOR 1 POSITION 12	3779	966	CH 8	4129
390	REFLECTOR 2 POSITION 12	4129	968	CH 9	3779
392	REFL 1 POS 12 2ND LOOK	4129	970	CH 10	4129
	REFL 2 POS 12 2ND LOOK	3779		CH 11	3779
	NADIR SAMPLE 12	15911		CH 12	4129
	CH 3			CH 13	3779
	CH 4			CH 14	15912
	CH 5			CH 15	
	CH 6				
	CH 7				
	CH 8				
	CH 9				
	CH 10				
	CH 11				
	CH 12				
	CH 13				
	CH 14				
	CH 15				
	REFLECTOR 1 POSITION 12				
	REFLECTOR 2 POSITION 12				
	REFL 1 POS 12 2ND LOOK				
	REFL 2 POS 12 2ND LOOK				
	NADIR SAMPLE 12				
	CH 3				

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16419	972	CH 4	16416
396	CH 5	15600	974	CH 5	15600
398	CH 6	17164	976	CH 6	17165
400	CH 7	15588	978	CH 7	15591
402	CH 8	16581	980	CH 8	16579
404	CH 9	16385	982	CH 9	16383
406	CH 10	16574	984	CH 10	16573
408	CH 11	17665	986	CH 11	17666
410	CH 12	17815	988	CH 12	17810
412	CH 13	17710	990	CH 13	17718
414	CH 14	19439	992	CH 14	19446
416	CH 15	16508	994	CH 15	16507
418	REFLECTOR 1 POSITION 13	4129	996	REFLECTOR 1 POSITION 30	4129
420	REFLECTOR 2 POSITION 13	3779	998	REFLECTOR 2 POSITION 30	3779
422	REFL 1 POS 13 2ND LOOK	4129	1000	REFL 1 POS 30 2ND LOOK	4129
424	REFL 2 POS 13 2ND LOOK	3779	1002	REFL 2 POS 30 2ND LOOK	3779
426	NADIR SAMPLE 13	15911	1004	NADIR SAMPLE 30	15917
428	CH 4	16416	1006	CH 4	16417
430	CH 5	15597	1008	CH 5	15599
432	CH 6	17164	1010	CH 6	17168
434	CH 7	15591	1012	CH 7	15586
436	CH 8	16581	1014	CH 8	16580
438	CH 9	16382	1016	CH 9	16384
440	CH 10	16574	1018	CH 10	16580
442	CH 11	17667	1020	CH 11	17657
444	CH 12	17802	1022	CH 12	17812
446	CH 13	17721	1024	CH 13	17710
448	CH 14	19426	1026	CH 14	19436
450	CH 15	16507	1028	CH 15	16508
452	REFLECTOR 1 POSITION 14	4129	1030	REFLECTOR 1 COLD CAL POS	OE
454	REFLECTOR 2 POSITION 14	3779	1032	REFLECTOR 2 COLD CAL POS	OE
456	REFL 1 POS 14 2ND LOOK	4129	1034	REFL 1 COLD CAL 2ND LOOK	OE
458	REFL 2 POS 14 2ND LOOK	3779	1036	REFL 2 COLD CAL 2ND LOOK	OE
460	NADIR SAMPLE 14	15910	1038	COLD CAL DATA 1	0
462	CH 4	16419	1040	CH 4	0
464	CH 5	15599	1042	CH 5	0
466	CH 6	17165	1044	CH 6	0
468	CH 7	15590	1046	CH 7	0
470	CH 8	16582	1048	CH 8	0
472	CH 9	16384	1050	CH 9	0
474	CH 10	16574	1052	CH 10	0
476	CH 11	17663	1054	CH 11	0
478	CH 12	17808	1056	CH 12	0
480	CH 13	17709	1058	CH 13	0
482	CH 14	19429	1060	CH 14	0
484	CH 15	16508	1062	CH 15	0
486	REFLECTOR 1 POSITION 15	4129	1064	COLD CAL DATA 2	0
488	REFLECTOR 2 POSITION 15	3779	1066	CH 3	0
490	REFL 1 POS 15 2ND LOOK	4129	1068	CH 4	0
492	REFL 2 POS 15 2ND LOOK	3779	1070	CH 5	0
				CH 6	0



ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	NADIR SAMPLE 15	CH 3	15904	1072	CH 7
496		CH 4	16419	1074	CH 8
498		CH 5	15596	1076	CH 9
500		CH 6	17166	1078	CH 10
502		CH 7	15588	1080	CH 11
504		CH 8	16578	1082	CH 12
506		CH 9	16380	1084	CH 13
508		CH 10	16574	1086	CH 14
510		CH 11	17657	1088	CH 15
512		CH 12	17813	1182	REFLECTOR 1 WARM CAL POS
514		CH 13	17710	1184	REFLECTOR 2 WARM CAL POS
516		CH 14	19433	1186	REFL 1 WARM CAL 2ND LOOK
518		CH 15	16507	1188	REFL 2 WARM CAL 2ND LOOK
520	REFLECTOR 1 POSITION 16	CH 16	4129	1190	WARM CAL DATA 1
522	REFLECTOR 2 POSITION 16	CH 17	3779	1192	CH 3
524	REFL 1 POS 16 2ND LOOK	CH 18	4129	1194	CH 4
526	REFL 2 POS 16 2ND LOOK	CH 19	3779	1196	CH 5
528	NADIR SAMPLE 16	CH 20	15914	1198	CH 6
530		CH 21	16417	1200	CH 7
532		CH 22	15600	1202	CH 8
534		CH 23	17165	1204	CH 9
536		CH 24	15589	1206	CH 10
538		CH 25	16580	1208	CH 11
540		CH 26	16381	1210	CH 12
542		CH 27	16572	1212	CH 13
544		CH 28	17667	1214	CH 14
546		CH 29	17811	1216	CH 15
548		CH 30	17720	1218	CH 3
550		CH 31	19448	1220	CH 4
552		CH 32	16509	1222	CH 5
554	REFLECTOR 1 POSITION 17	CH 33	4129	1224	CH 6
556	REFLECTOR 2 POSITION 17	CH 34	3779	1226	CH 7
558	REFL 1 POS 17 2ND LOOK	CH 35	4129	1228	CH 8
560	REFL 2 POS 17 2ND LOOK	CH 36	3779	1230	CH 9
562	NADIR SAMPLE 17	CH 37	15909	1232	CH 10
564		CH 38	16415	1234	CH 11
566		CH 39	15595	1236	CH 12
568		CH 40	17164	1238	CH 13
570		CH 41	15586	1240	CH 14
					CH 15
					CH 16
					CH 17
					CH 18
					CH 19
					CH 20
					CH 21
					CH 22
					CH 23
					CH 24
					CH 25
					CH 26
					CH 27
					CH 28
					CH 29
					CH 30
					CH 31
					CH 32
					CH 33
					CH 34
					CH 35
					CH 36
					CH 37
					CH 38
					CH 39
					CH 40
					CH 41
					CH 42
					CH 43
					CH 44
					CH 45
					CH 46
					CH 47
					CH 48
					CH 49
					CH 50
					CH 51
					CH 52
					CH 53
					CH 54
					CH 55
					CH 56
					CH 57
					CH 58
					CH 59
					CH 60
					CH 61
					CH 62
					CH 63
					CH 64
					CH 65
					CH 66
					CH 67
					CH 68
					CH 69
					CH 70
					CH 71
					CH 72
					CH 73
					CH 74
					CH 75
					CH 76
					CH 77
					CH 78
					CH 79
					CH 80
					CH 81
					CH 82
					CH 83
					CH 84
					CH 85
					CH 86
					CH 87
					CH 88
					CH 89
					CH 90
					CH 91
					CH 92
					CH 93
					CH 94
					CH 95
					CH 96
					CH 97
					CH 98
					CH 99
					CH 100
					CH 101
					CH 102
					CH 103
					CH 104
					CH 105
					CH 106
					CH 107
					CH 108
					CH 109
					CH 110
					CH 111
					CH 112
					CH 113
					CH 114
					CH 115
					CH 116
					CH 117
					CH 118
					CH 119
					CH 120
					CH 121
					CH 122
					CH 123
					CH 124
					CH 125
					CH 126
					CH 127
					CH 128
					CH 129
					CH 130
					CH 131
					CH 132
					CH 133
					CH 134
					CH 135
					CH 136
					CH 137
					CH 138
					CH 139
					CH 140
					CH 141
					CH 142
					CH 143
					CH 144
					CH 145
					CH 146
					CH 147
					CH 148
					CH 149
					CH 150
					CH 151
					CH 152
					CH 153
					CH 154
					CH 155
					CH 156
					CH 157
					CH 158
					CH 159
					CH 160
					CH 161
					CH 162
					CH 163
					CH 164
					CH 165
					CH 166
					CH 167
					CH 168
					CH 169
					CH 170
					CH 171
					CH 172
					CH 173
					CH 174
					CH 175
					CH 176
					CH 177
					CH 178
					CH 179
					CH 180
					CH 181
					CH 182
					CH 183
					CH 184
					CH 185
					CH 186
					CH 187
					CH 188
					CH 189
					CH 190
					CH 191
					CH 192
					CH 193
					CH 194
					CH 195
					CH 196
					CH 197
					CH 198
					CH 199
					CH 200
					CH 201
					CH 202
					CH 203
					CH 204
					CH 205
					CH 206
					CH 207
					CH 208
					CH 209
					CH 210
					CH 211
					CH 212
					CH 213
					CH 214
					CH 215
					CH 216
					CH 217
					CH 218
					CH 219
					CH 220
					CH 221
					CH 222
					CH 223
					CH 224
					CH 225
					CH 226
					CH 227
					CH 228
					CH 229
					CH 230
					CH 231
					CH 232
					CH 233
					CH 234
					CH 235
					CH 236
					CH 237
					CH 238
					CH 239
					CH 240
					CH 241
					CH 242
					CH 243
					CH 244
					CH 245
					CH 246
					CH 247
					CH 248
					CH 249
					CH 250
					CH 251
					CH 252
					CH 253
					CH 254
					CH 255
					CH 256
					CH 257
					CH 258
					CH 259
					CH 260
					CH 261
					CH 262
					CH 263
					CH 264
					CH 265
					CH 266
					CH 267
					CH 268
					CH 269
					CH 270
					CH 271
					CH 272
					CH 273
					CH 274
					CH 275
					CH 276
					CH 277
					CH 278
					CH 279
					CH 280
					CH 281
					CH 282
					CH 283
					CH 284
					CH 285
					CH 286
					CH 287
					CH 288
					CH 289
					CH 290
					CH 291
					CH 292
					CH 293
					CH 294
					CH 295
					CH 296
					CH 297
					CH 298
					CH 299
					CH 300
					CH 301
					CH 302
					CH 303
					CH 304
					CH 305
					CH 306
					CH 307
					CH 308
					CH 309

EOS A1\_03 EL.EXE;40 SCIENCE DATA  
NADIR MODE

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	18281	23.46
1092	SCAN MOTOR A1-2	19686	25.43
1094	FEED HORN A1-1	20610	28.24
1096	FEED HORN A1-2	21817	30.60
1098	RF MUX A1-1	22747	32.19
1098	RF MUX A1-2	24125	35.00
1100	LOCAL OSCILLATOR CHANNEL 3	25067	37.04
1102	LOCAL OSCILLATOR CHANNEL 4	25472	37.14
1104	LOCAL OSCILLATOR CHANNEL 5	24313	35.54
1106	LOCAL OSCILLATOR CHANNEL 6	23001	32.06
1108	LOCAL OSCILLATOR CHANNEL 7	23469	33.69
1110	LOCAL OSCILLATOR CHANNEL 8	24863	36.45
1112	LOCAL OSCILLATOR CHANNEL 15	24542	35.38
1114	LOCAL OSCILLATOR CHANNEL 15	22749	32.23
1116	PLLO #2	25663	37.92
1118	PLLO #1	18690	37.38
1120	1553 INTERFACE	24434	35.55
1122	MIXER/IF AMPLIFIER CHANNEL 3	24595	35.35
1124	MIXER/IF AMPLIFIER CHANNEL 4	24193	34.98
1126	MIXER/IF AMPLIFIER CHANNEL 5	23052	32.78
1128	MIXER/IF AMPLIFIER CHANNEL 6	23070	33.37
1130	MIXER/IF AMPLIFIER CHANNEL 8	24518	35.56
1132	MIXER/IF AMPLIFIER CH 9 THRU 14	22514	31.97
1134	MIXER/IF AMPLIFIER CHANNEL 15	24300	35.43
1136	MIXER/IF AMPLIFIER CHANNEL 11 THRU 14	24054	34.76
1138	IF AMPLIFIER CHANNEL 9	24238	35.02
1140	IF AMPLIFIER CHANNEL 10	24084	34.98
1142	IF AMPLIFIER CHANNEL 11	23219	32.45
1144	IF AMPLIFIER CHANNEL 11	25666	37.22
1146	DC/DC CONVERTER	22803	31.76
1148	IF AMPLIFIER CHANNEL 13	23162	32.90
1150	IF AMPLIFIER CHANNEL 14	22969	32.32
1152	IF AMPLIFIER CHANNEL 12	23497	33.62
1154	RF SHELF A1-1	24201	34.37
1156	RF SHELF A1-2	21129	29.08
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	23846	24.68
1160	A1-1 WARM LOAD 1	24347	24.80
1162	A1-1 WARM LOAD 2	23840	24.82
1164	A1-1 WARM LOAD 3	23920	24.80
1166	A1-1 WARM LOAD 4	24116	24.81
1168	A1-1 WARM LOAD CENTER	25242	26.91
1170	A1-2 WARM LOAD 1	25298	26.92
1172	A1-2 WARM LOAD 2	25306	26.91
1174	A1-2 WARM LOAD 3	25299	26.80
1176	A1-2 WARM LOAD 4	25311	26.91
1178	A1-2 WARM LOAD CENTER	25271	26.91
1180	TEMP SENSOR REFERENCE VOLTAGE		

## DESCRIPTION

## STATUS

ANTENNA IN FULL SCAN MODE	NO
ANTENNA IN WARM CAL MODE	NO
ANTENNA IN COLD CAL MODE	YES
ANTENNA IN NADIR MODE	NO
COLD CAL. POSITION LSB	ZERO
COLD CAL. POSITION MSB	ZERO
PLO REDUNDANCY	PLLO # 1
SCANNER A1-1 POWER	ON
SCANNER A1-2 POWER	ON
PLLO #1 LOCK	YES
PLLO #2 LOCK	OFF
ADC LATCHUP FLAG	ONE

## ENGINEERING DATA

## DESCRIPTION

## DEG C

A1-1 SCANNER MOTOR TEMPERATURE	22.6
A1-1 RF SHELF TEMPERATURE #1	25.5
A1-1 WARM LOAD TEMPERATURE	23.4
A1-2 SCANNER MOTOR TEMPERATURE	24.9
A1-2 RF SHELF TEMPERATURE #1	27.5
A1-2 WARM LOAD TEMPERATURE	25.2
A1-1 RF SHELF TEMPERATURE #2	25.4
A1-2 RF SHELF TEMPERATURE #2	27.2

## VALUE

## MA/VOLTS

## SIGNAL PROCESSOR

+5 VDC	22127	4.9
+15 VDC	21837	15.1
-15 VDC	21794	-15.0
+5 VDC	22154	4.9

## SCAN DRIVE

+15 VDC	22115	14.9
-15 VDC	21859	-15.1
+15 VDC	22558	14.8
-15 VDC	22082	-15.2

## PLO

+8 VDC	21813	7.9
+10 VDC	21415	10.0
+10 VDC	21430	10.0
+10 VDC	21393	10.0

## RECEIVER

MIXER/IF AMPLIFIER A1-1	21444	10.0
A1-2	32767	327.7

## LO CHANNEL 6

+10 VDC	21245	10.1
+10 VDC	21185	10.1
+10 VDC	21386	10.0
+10 VDC	21315	10.0

## SPARE

+10 VDC	22014	15.0
+15 VDC	16363	2247.0

## LO CHANNEL 3

4	63	0.2
5	39	0.1
8		
15		

## QUIET BUS CURRENT

A1-1 NOISY POWER BUS CURRENT	
A1-2 NOISY POWER BUS CURRENT	

AZONIX DATA  
NADIR MODE

PRT TEMPERATURES

VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

FIXED TARGET

BASEPLATE

THERMOCOUPLE TEMPERATURES

FIXED TARGET SHROUD

VARIABLE TARGET SHROUD

FIXED TARGET N2

VARIABLE TARGET N2

HEATER N2

FIXED TARGET FLOW METER  
VARIABLE TARGET FLOW METER  
BASEPLATE HEATER N2  
BASEPLATE N2  
BASEPLATE FLOW METER  
ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00

EOS A1-03 E1.1.EXE;40 COLD CAL MODE P1 13-NOV-98 16:20:26 SCAN NUMBER 419  
 [ 5 ] SCIENCE DATA ELEMENT 0000

[ 6 ] CONTROL/STATUS ELEMENT 00

[ 7 ] ENGINEERING ELEMENT 00

# COMMANDS

[ 9 ]	SCANNER A1-1	POWER =	ON	PLO POWER =	PLO#1 [ 15 ]
[ 10 ]	SCANNER A1-2	POWER =	ON	COLD CAL POSITION 1 =	NO [ 16 ]
[ 11 ]	ANTENNA FULL	SCAN MODE =	NO	2 =	YES [ 17 ]
[ 12 ]	WARM CAL	=	NO	3 =	NO [ 18 ]
[ 13 ]	COLD CAL	=	YES	COLD CAL POSITION 4 =	NO [ 19 ]
[ 14 ]	NADIR	=	NO	RESET C&DH PROCESSOR	[ 20 ]
ENGR OK	POWER	ON	CHECKSUM	GSE MODE	[ 21 ]
SELECT BUTTON 3	SCREEN ONLY [ 2 ]	PRINT [ 3 ]	FULL	SA28	1622 SA29 3229
					[ 1 ] RETURN

*Parag. 3.3.5.3.3 step 10. Cold Cal pos. 2*

*Support TDS 11 of AE-26156/9*

*final CPT. EOS-AMSU-A1 S/W E02*

*S/W 560863 oper 0580*

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	NADIR SAMPLE	16552
2		00000011	574		16338
3	PACKET LENGTH	00000010	576		16517
4		10111111	578		17544
5	UNIT SERIAL NUMBER	00000011	580		17694
6		00000000	582		17583
7	INSTRUMENT MODE/STATUS	10011010	584		19288
8		00101000	586		16465
10	REFLECTOR 1 POSITION	4050	588	REFLECTOR 1 POSITION 18	4050
12	REFLECTOR 2 POSITION	3703	590	REFLECTOR 2 POSITION 18	3704
14	REFL 1 POS 1 2ND LOOK	4050	592	REFL 1 POS 18 2ND LOOK	4050
16	REFL 2 POS 1 2ND LOOK	3704	594	REFL 2 POS 18 2ND LOOK	3703
18	NADIR SAMPLE	15893	596	NADIR SAMPLE	15896
20		16394	598		16392
22		15572	600		15568
24		17129	602		17129
26		15547	604		15549
28		16557	606		16554
30		16338	608		16339
32		16517	610		16515
34		17545	612		17545
36		17685	614		17701
38		17594	616		17589
40		19275	618		19285
42		16468	620		16468
44	REFLECTOR 1 POSITION	4050	622	REFLECTOR 1 POSITION 19	4050
46	REFLECTOR 2 POSITION	3701	624	REFLECTOR 2 POSITION 19	3704
48	REFL 1 POS 2 2ND LOOK	4050	626	REFL 1 POS 19 2ND LOOK	4050
50	REFL 2 POS 2 2ND LOOK	3704	628	REFL 2 POS 19 2ND LOOK	3703
52	NADIR SAMPLE	15896	630	NADIR SAMPLE	15894
54		16392	632		16389
56		15572	634		15569
58		17129	636		17130
60		15552	638		15545
62		16551	640		16556
64		16338	642		16340
66		16515	644		16516
68		17548	646		17543
70		17701	648		17700
72		17582	650		17573
74		19260	652		19264
76		16468	654		16468
78	REFLECTOR 1 POSITION	4050	656	REFLECTOR 1 POSITION 20	4050
80	REFLECTOR 2 POSITION	3703	658	REFLECTOR 2 POSITION 20	3703
82	REFL 1 POS 3 2ND LOOK	4050	660	REFL 1 POS 20 2ND LOOK	4050
84	REFL 2 POS 3 2ND LOOK	3704	662	REFL 2 POS 20 2ND LOOK	3704
86	NADIR SAMPLE	15894	664	NADIR SAMPLE	15897
88		16395	666		16393
90		15573	668		15568
92		17127	670		17130

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15546	672	CH 7	15552
96	CH 8	16556	674	CH 8	16554
98	CH 9	16338	676	CH 9	16342
100	CH 10	16518	678	CH 10	16524
102	CH 11	17543	680	CH 11	17547
104	CH 12	17686	682	CH 12	17701
106	CH 13	17570	684	CH 13	17593
108	CH 14	19249	686	CH 14	19299
110	CH 15	16468	688	CH 15	16466
112	REFLECTOR 1 POSITION 4	4050	690	REFLECTOR 1 POSITION 21	4050
114	REFLECTOR 2 POSITION 4	3703	692	REFLECTOR 2 POSITION 21	3703
116	REFL 1 POS 4 2ND LOOK	4050	694	REFL 1 POS 21 2ND LOOK	4050
118	REFL 2 POS 4 2ND LOOK	3703	696	REFL 2 POS 21 2ND LOOK	3704
120	NADIR SAMPLE 4	15894	698	NADIR SAMPLE 21	15897
122	CH 3	16397	700	CH 3	16391
124	CH 4	15568	702	CH 4	15570
126	CH 5	17129	704	CH 5	17126
128	CH 6	15549	706	CH 6	15552
130	CH 7	16554	708	CH 7	16553
132	CH 8	16339	710	CH 8	16338
134	CH 9	16516	712	CH 9	16518
136	CH 10	17542	714	CH 10	17540
138	CH 11	17691	716	CH 11	17698
140	CH 12	17573	718	CH 12	17577
142	CH 13	19280	720	CH 13	19288
144	CH 14	16467	722	CH 14	16467
146	CH 15	4050	724	CH 15	4050
148	REFLECTOR 1 POSITION 5	3704	726	REFLECTOR 1 POSITION 22	3703
150	REFLECTOR 2 POSITION 5	4050	728	REFLECTOR 2 POSITION 22	4050
152	REFL 1 POS 5 2ND LOOK	3703	730	REFL 1 POS 22 2ND LOOK	3703
154	REFL 2 POS 5 2ND LOOK	15893	732	REFL 2 POS 22 2ND LOOK	15895
156	NADIR SAMPLE 5	16393	734	NADIR SAMPLE 22	16393
158	CH 3	15572	736	CH 3	15571
160	CH 4	17131	738	CH 4	17131
162	CH 5	15548	740	CH 5	15546
164	CH 6	16552	742	CH 6	16556
166	CH 7	16338	744	CH 7	16340
168	CH 8	16518	746	CH 8	16520
170	CH 9	17549	748	CH 9	17552
172	CH 10	17699	750	CH 10	17693
174	CH 11	17573	752	CH 11	17588
176	CH 12	19284	754	CH 12	19271
178	CH 13	16468	756	CH 13	16467
180	CH 14	4050	758	CH 14	4050
182	CH 15	3704	760	CH 15	3703
184	REFLECTOR 1 POSITION 6	4050	762	REFLECTOR 1 POSITION 23	4050
186	REFLECTOR 2 POSITION 6	3704	764	REFLECTOR 2 POSITION 23	3703
188	REFL 1 POS 6 2ND LOOK	15896	766	REFL 1 POS 23 2ND LOOK	15889
190	REFL 2 POS 6 2ND LOOK	16393	768	REFL 2 POS 23 2ND LOOK	16392
192	NADIR SAMPLE 6	15570	770	NADIR SAMPLE 23	15568

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17128	772	CH 6	17130
196	CH 7	15545	774	CH 7	15549
198	CH 8	16557	776	CH 8	16554
200	CH 9	16339	778	CH 9	16337
202	CH 10	16514	780	CH 10	16520
204	CH 11	17546	782	CH 11	17543
206	CH 12	17697	784	CH 12	17705
208	CH 13	17583	786	CH 13	17575
210	CH 14	19292	788	CH 14	19316
212	CH 15	16467	790	CH 15	16468
214	REFLECTOR 1 POSITION 7	4050	792	REFLECTOR 1 POSITION 24	4050
216	REFLECTOR 2 POSITION 7	3704	794	REFLECTOR 2 POSITION 24	3703
218	REFL 1 POS 7 2ND LOOK	4050	796	REFL 1 POS 24 2ND LOOK	4050
220	REFL 2 POS 7 2ND LOOK	3704	798	REFL 2 POS 24 2ND LOOK	3703
222	NADIR SAMPLE 7	15898	800	NADIR SAMPLE 24	15896
224	CH 4	16392	802	CH 4	16391
226	CH 5	15572	804	CH 5	15570
228	CH 6	17126	806	CH 6	17131
230	CH 7	15548	808	CH 7	15547
232	CH 8	16560	810	CH 8	16557
234	CH 9	16339	812	CH 9	16339
236	CH 10	16517	814	CH 10	16523
238	CH 11	17544	816	CH 11	17549
240	CH 12	17701	818	CH 12	17693
242	CH 13	17581	820	CH 13	17583
244	CH 14	19277	822	CH 14	19274
246	CH 15	16470	824	CH 15	16467
248	REFLECTOR 1 POSITION 8	4050	826	REFLECTOR 1 POSITION 25	4050
250	REFLECTOR 2 POSITION 8	3704	828	REFLECTOR 2 POSITION 25	3703
252	REFL 1 POS 8 2ND LOOK	4050	830	REFL 1 POS 25 2ND LOOK	4050
254	REFL 2 POS 8 2ND LOOK	3703	832	REFL 2 POS 25 2ND LOOK	3704
256	NADIR SAMPLE 8	15896	834	NADIR SAMPLE 25	15890
258	CH 4	16388	836	CH 4	16389
260	CH 5	15574	838	CH 5	15573
262	CH 6	17128	840	CH 6	17130
264	CH 7	15547	842	CH 7	15545
266	CH 8	16553	844	CH 8	16553
268	CH 9	16340	846	CH 9	16342
270	CH 10	16518	848	CH 10	16522
272	CH 11	17548	850	CH 11	17548
274	CH 12	17696	852	CH 12	17696
276	CH 13	17584	854	CH 13	17575
278	CH 14	19275	856	CH 14	19305
280	CH 15	16468	858	CH 15	16468
282	REFLECTOR 1 POSITION 9	4050	860	REFLECTOR 1 POSITION 26	4050
284	REFLECTOR 2 POSITION 9	3704	862	REFLECTOR 2 POSITION 26	3703
286	REFL 1 POS 9 2ND LOOK	4050	864	REFL 1 POS 26 2ND LOOK	4050
288	REFL 2 POS 9 2ND LOOK	3703	866	REFL 2 POS 26 2ND LOOK	3704
290	NADIR SAMPLE 9	15892	868	NADIR SAMPLE 26	15895
292	CH 4	16391	870	CH 4	16392



ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15570	872	REFLECTOR 1 POSITION 27	15898
296	CH 6	17131	874	REFLECTOR 2 POSITION 27	16393
298	CH 7	15546	876	REFL 1 POS 27 2ND LOOK	15570
300	CH 8	16557	878	REFL 2 POS 27 2ND LOOK	17129
302	CH 9	16336	880	NADIR SAMPLE 27	15546
304	CH 10	16524	882	CH 3	16553
306	CH 11	17545	884	CH 4	16338
308	CH 12	17686	886	CH 5	16522
310	CH 13	17597	888	CH 6	17545
312	CH 14	19286	890	CH 7	17698
314	CH 15	16468	892	CH 8	17573
316	REFLECTOR 1 POSITION 10	4050	894	CH 9	19291
318	REFLECTOR 2 POSITION 10	3703	896	CH 10	16468
320	REFL 1 POS 10 2ND LOOK	4050	898	CH 11	4050
322	REFL 2 POS 10 2ND LOOK	3704	900	CH 12	3704
324	NADIR SAMPLE 10	15897	902	CH 13	4050
326	CH 3	16392	904	CH 14	3704
328	CH 4	15574	906	CH 15	15898
330	CH 5	17129	908	CH 1	16393
332	CH 6	15548	910	CH 2	15570
334	CH 7	16556	912	CH 3	17129
336	CH 8	16337	914	CH 4	15546
338	CH 9	16523	916	CH 5	16553
340	CH 10	17544	918	CH 6	16338
342	CH 11	17699	920	CH 7	16522
344	CH 12	17580	922	CH 8	17545
346	CH 13	19285	924	CH 9	17698
348	CH 14	16469	926	CH 10	17573
350	CH 15	4050	928	CH 11	19291
352	REFLECTOR 1 POSITION 11	3704	930	CH 12	16468
354	REFLECTOR 2 POSITION 11	4050	932	CH 13	4050
356	REFL 1 POS 11 2ND LOOK	3703	934	CH 14	3704
358	REFL 2 POS 11 2ND LOOK	15892	936	CH 15	4050
360	NADIR SAMPLE 11	16394	938	CH 1	3703
362	CH 3	15571	940	CH 2	15896
364	CH 4	17127	942	CH 3	16391
366	CH 5	15551	944	CH 4	15572
368	CH 6	16555	946	CH 5	17130
370	CH 7	16342	948	CH 6	15549
372	CH 8	16522	950	CH 7	16556
374	CH 9	17540	952	CH 8	16342
376	CH 10	17687	954	CH 9	16519
378	CH 11	17586	956	CH 10	17545
380	CH 12	19275	958	CH 11	17701
382	CH 13	16468	960	CH 12	17573
384	CH 14	4050	962	CH 13	19280
386	CH 15	3703	964	CH 14	16466
388	REFLECTOR 1 POSITION 12	4050	966	CH 15	4050
390	REFLECTOR 2 POSITION 12	3704	968	REFLECTOR 1 POSITION 29	3704
392	REFL 1 POS 12 2ND LOOK	15898	970	REFLECTOR 2 POSITION 29	3704
	REFL 2 POS 12 2ND LOOK			REFL 1 POS 29 2ND LOOK	4050
	NADIR SAMPLE 12			REFL 2 POS 29 2ND LOOK	3703
	CH 3			NADIR SAMPLE 29	15898

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16389	972	CH 4	16392
396	CH 5	15573	974	CH 5	15571
398	CH 6	17131	976	CH 6	17130
400	CH 7	15547	980	CH 7	15550
402	CH 8	16555	982	CH 8	16553
404	CH 9	16342	984	CH 9	16341
406	CH 10	16519	986	CH 10	16519
408	CH 11	17740	988	CH 11	17548
410	CH 12	17708	990	CH 12	17692
412	CH 13	17575	992	CH 13	17579
414	CH 14	19287	994	CH 14	19291
416	CH 15	16466	996	CH 15	16467
418	REFLECTOR 1 POSITION 13	4050	998	REFLECTOR 1 POSITION 30	4050
420	REFLECTOR 2 POSITION 13	3703	1000	REFLECTOR 2 POSITION 30	3703
422	REFL 1 POS 13 2ND LOOK	4050	1002	REFL 1 POS 30 2ND LOOK	4050
424	REFL 2 POS 13 2ND LOOK	3704	1004	REFL 2 POS 30 2ND LOOK	3704
426	NADIR SAMPLE 13	15897	1006	NADIR SAMPLE 30	15900
428	CH 4	16392	1008	CH 4	16393
430	CH 5	15570	1010	CH 5	15568
432	CH 6	17131	1012	CH 6	17130
434	CH 7	15550	1014	CH 7	15549
436	CH 8	16552	1016	CH 8	16552
438	CH 9	16343	1018	CH 9	16339
440	CH 10	16518	1020	CH 10	16517
442	CH 11	17547	1022	CH 11	17541
444	CH 12	17686	1024	CH 12	17691
446	CH 13	17580	1026	CH 13	17582
448	CH 14	19264	1028	CH 14	19269
450	CH 15	16469	1030	CH 15	16469
452	REFLECTOR 1 POSITION 14	4050	1032	REFLECTOR 1 COLD CAL POS	OE
454	REFLECTOR 2 POSITION 14	3703	1034	REFLECTOR 2 COLD CAL POS	OE
456	REFL 1 POS 14 2ND LOOK	4050	1036	REFL 1 COLD CAL 2ND LOOK	OE
458	REFL 2 POS 14 2ND LOOK	3703	1038	REFL 2 COLD CAL 2ND LOOK	0
460	NADIR SAMPLE 14	15898	1040	COLD CAL DATA 1	0
462	CH 4	16392	1042	CH 4	0
464	CH 5	15571	1044	CH 5	0
466	CH 6	17128	1046	CH 6	0
468	CH 7	15550	1048	CH 7	0
470	CH 8	16553	1050	CH 8	0
472	CH 9	16340	1052	CH 9	0
474	CH 10	16518	1054	CH 10	0
476	CH 11	17544	1056	CH 11	0
478	CH 12	17683	1058	CH 12	0
480	CH 13	17579	1060	CH 13	0
482	CH 14	19282	1062	CH 14	0
484	CH 15	16469	1064	CH 15	0
486	REFLECTOR 1 POSITION 15	4050	1066	COLD CAL DATA 2	0
488	REFLECTOR 2 POSITION 15	3704	1068	CH 3	0
490	REFL 1 POS 15 2ND LOOK	4050	1070	CH 4	0
492	REFL 2 POS 15 2ND LOOK	3704		CH 5	0



EOS A1\_03 EL.EXE;40 SCIENCE DATA  
NADIR MODE

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE	DEG C
1090	SCAN MOTOR A1-1	18423	23.73	
1092	SCAN MOTOR A1-2	19880	25.80	
1094	FEED HORN A1-1	20881	28.75	
1096	FEED HORN A1-2	22071	31.09	
1098	RF MUX A1-1	23076	32.83	
1100	RF MUX A1-2	24463	35.66	
1102	LOCAL OSCILLATOR CHANNEL 3	25416	37.71	
1104	LOCAL OSCILLATOR CHANNEL 4	25823	37.83	
1106	LOCAL OSCILLATOR CHANNEL 5	24638	36.17	
1108	LOCAL OSCILLATOR CHANNEL 6	23294	32.62	
1110	LOCAL OSCILLATOR CHANNEL 7	23798	34.33	
1112	LOCAL OSCILLATOR CHANNEL 8	25196	37.12	
1114	LOCAL OSCILLATOR CHANNEL 15	24867	36.01	
1116	PLLO #2	23067	32.84	
1118	PLLO #1	25976	38.53	
1120	1553 INTERFACE	19031	38.05	
1122	MIXER/IF AMPLIFIER CHANNEL 3	24778	36.19	
1124	MIXER/IF AMPLIFIER CHANNEL 4	24934	36.01	
1126	MIXER/IF AMPLIFIER CHANNEL 5	24522	35.62	
1128	MIXER/IF AMPLIFIER CHANNEL 6	23381	33.41	
1130	MIXER/IF AMPLIFIER CHANNEL 7	23406	34.02	
1132	MIXER/IF AMPLIFIER CHANNEL 8	24862	36.23	
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	22851	32.62	
1136	MIXER/IF AMPLIFIER CHANNEL 15	24630	36.07	
1138	IF AMPLIFIER CHANNEL 11 THRU 14	24378	35.39	
1140	IF AMPLIFIER CHANNEL 9	24563	35.65	
1142	IF AMPLIFIER CHANNEL 10	24410	35.62	
1144	IF AMPLIFIER CHANNEL 11	23575	33.14	
1146	DC/DC CONVERTER	25887	37.65	
1148	IF AMPLIFIER CHANNEL 13	23157	32.44	
1150	IF AMPLIFIER CHANNEL 14	23518	33.59	
1152	IF AMPLIFIER CHANNEL 12	23326	33.01	
1154	RF SHIELD A1-1	23804	34.21	
1156	RF SHIELD A1-2	24528	35.00	
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	21426	29.65	
1160	A1-1 WARM LOAD 1	24091	25.17	
1162	A1-1 WARM LOAD 2	24593	25.29	
1164	A1-1 WARM LOAD 3	24089	25.31	
1166	A1-1 WARM LOAD 4	24162	25.27	
1168	A1-1 WARM LOAD CENTER	24360	25.29	
1170	A1-2 WARM LOAD 1	25550	27.52	
1172	A1-2 WARM LOAD 2	25604	27.53	
1174	A1-2 WARM LOAD 3	25611	27.52	
1176	A1-2 WARM LOAD 4	25604	27.41	
1178	A1-2 WARM LOAD CENTER	25616	27.52	
1180	TEMP SENSOR REFERENCE VOLTAGE	25272		



AZONIX DATA  
NADIR MODE

PRT TEMPERATURES

VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

FIXED TARGET

BASEPLATE

THERMOCOUPLE TEMPERATURES

FIXED TARGET SHROUD

VARIABLE TARGET SHROUD

FIXED TARGET N2

VARIABLE TARGET N2

HEATER N2

FIXED TARGET FLOW METER  
VARIABLE TARGET FLOW METER  
BASEPLATE HEATER N2  
BASEPLATE N2  
BASEPLATE FLOW METER  
ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00

EOS A1-03 E1.EXE:40 COLD CAL MODE  
 [ 5 ] SCIENCE DATA ELEMENT 0000  
 [ 6 ] CONTROL/STATUS ELEMENT 00  
 [ 7 ] ENGINEERING ELEMENT 00

P1 13-NOV-98 16:47:06 SCAN NUMBER 619

COMMANDS  
 [ 9 ] SCANNER A1-1 POWER = ON  
 [ 10 ] SCANNER A1-2 POWER = ON  
 [ 11 ] ANTENNA FULL SCAN MODE = NO  
 [ 12 ] WARM CAL = NO  
 [ 13 ] COLD CAL = YES  
 [ 14 ] NADIR = NO  
 ENGR OK POWER ON CHECKSUM IN B953 CALC B953 SA28 1822 SA29 3629  
 SELECT BUTTON 3 SCREEN ONLY [ 2 ] PRINT [ 3 ] FULL [ 1 ] RETURN

Parag. 3.3.5.3.3 Step 14 cold cal 2  
 Support TDS 11 of AE-26/56/9  
 final CPT- EOS AMSU/A1 SW 202  
 S/o 56-863 oper. 0580

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	NADIR SAMPLE 17	CH 8
2		00000011	574		CH 9
3	PACKET LENGTH	00000010	576		CH 10
4		10111111	578		CH 11
5	UNIT SERIAL NUMBER	00000011	580		CH 12
6		00000000	582		CH 13
7	INSTRUMENT MODE/STATUS	10011010	584		CH 14
8		00101000	586		CH 15
10	REFLECTOR 1 POSITION 1	4050	588	REFLECTOR 1 POSITION 18	4050
12	REFLECTOR 2 POSITION 1	3703	590	REFLECTOR 2 POSITION 18	3703
14	REFL 1 POS 1 2ND LOOK	4050	592	REFL 1 POS 18 2ND LOOK	4050
16	REFL 2 POS 1 2ND LOOK	3703	594	REFL 2 POS 18 2ND LOOK	3703
18	NADIR SAMPLE 1	15893	596	NADIR SAMPLE 18	15888
20		16391	598		16387
22		15564	600		15564
24		17122	602		17124
26		15545	604		15540
28		16549	606		16552
30		16336	608		16336
32		16510	610		16515
34		17534	612		17528
36		17680	614		17672
38		17549	616		17571
40		19261	618		19254
42		16462	620		16461
44	REFLECTOR 1 POSITION 2	4050	622	REFLECTOR 1 POSITION 19	4050
46	REFLECTOR 2 POSITION 2	3703	624	REFLECTOR 2 POSITION 19	3703
48	REFL 1 POS 2 2ND LOOK	4050	626	REFL 1 POS 19 2ND LOOK	4050
50	REFL 2 POS 2 2ND LOOK	3703	628	REFL 2 POS 19 2ND LOOK	3703
52	NADIR SAMPLE 2	15893	630	NADIR SAMPLE 19	15892
54		16389	632		16391
56		15563	634		15565
58		17124	636		17125
60		15546	638		15540
62		16335	640		16551
64		16549	642		16335
66		16512	644		16516
68		17524	646		17529
70		17672	648		17686
72		17556	650		17558
74		19260	652		19257
76		16461	654		16461
78	REFLECTOR 1 POSITION 3	4050	656	REFLECTOR 1 POSITION 20	4050
80	REFLECTOR 2 POSITION 3	3703	658	REFLECTOR 2 POSITION 20	3703
82	REFL 1 POS 3 2ND LOOK	4050	660	REFL 1 POS 20 2ND LOOK	4050
84	REFL 2 POS 3 2ND LOOK	3703	662	REFL 2 POS 20 2ND LOOK	3703
86	NADIR SAMPLE 3	15888	664	NADIR SAMPLE 20	15891
88		16393	666		16392
90		15566	668		15566
92		17123	670		17122



ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15544	672	CH 7	15546
96	CH 8	16551	674	CH 8	16552
98	CH 9	16334	676	CH 9	16333
100	CH 10	16511	678	CH 10	16513
102	CH 11	17528	680	CH 11	17527
104	CH 12	17675	682	CH 12	17674
106	CH 13	17571	684	CH 13	17561
108	CH 14	19240	686	CH 14	19248
110	CH 15	16463	688	CH 15	16460
112	REFLECTOR 1 POSITION 4	4050	690	REFLECTOR 1 POSITION 21	4050
114	REFLECTOR 2 POSITION 4	3703	692	REFLECTOR 2 POSITION 21	3704
116	REFL 1 POS 4 2ND LOOK	4050	694	REFL 1 POS 21 2ND LOOK	4050
118	REFL 2 POS 4 2ND LOOK	3704	696	REFL 2 POS 21 2ND LOOK	3703
120	NADIR SAMPLE 4	15900	698	NADIR SAMPLE 21	15892
122	CH 3	16391	700	CH 3	16388
124	CH 4	15565	702	CH 4	15569
126	CH 5	17122	704	CH 5	17124
128	CH 6	15544	706	CH 6	15546
130	CH 7	16547	708	CH 7	16547
132	CH 8	16334	710	CH 8	16336
134	CH 9	16515	712	CH 9	16510
136	CH 10	17525	714	CH 10	17528
138	CH 11	17666	716	CH 11	17673
140	CH 12	17568	718	CH 12	17561
142	CH 13	19263	720	CH 13	19273
144	CH 14	16462	722	CH 14	16461
146	CH 15	4050	724	CH 15	4050
148	REFLECTOR 1 POSITION 5	3703	726	REFLECTOR 1 POSITION 22	3703
150	REFLECTOR 2 POSITION 5	4050	728	REFLECTOR 2 POSITION 22	4050
152	REFL 1 POS 5 2ND LOOK	3703	730	REFL 1 POS 22 2ND LOOK	3703
154	REFL 2 POS 5 2ND LOOK	15893	732	REFL 2 POS 22 2ND LOOK	15898
156	NADIR SAMPLE 5	16391	734	NADIR SAMPLE 22	16391
158	CH 3	16391	736	CH 3	15566
160	CH 4	15569	738	CH 4	17128
162	CH 5	17127	740	CH 5	15545
164	CH 6	15545	742	CH 6	16554
166	CH 7	16550	744	CH 7	16336
168	CH 8	16336	746	CH 8	16511
170	CH 9	16514	748	CH 9	16511
172	CH 10	17526	750	CH 10	17530
174	CH 11	17684	752	CH 11	17681
176	CH 12	17562	754	CH 12	17560
178	CH 13	19248	756	CH 13	19268
180	CH 14	16461	758	CH 14	16464
182	CH 15	4050	760	CH 15	4050
184	REFLECTOR 1 POSITION 6	3703	762	REFLECTOR 1 POSITION 23	3703
186	REFLECTOR 2 POSITION 6	4050	764	REFLECTOR 2 POSITION 23	4050
188	REFL 1 POS 6 2ND LOOK	3703	766	REFL 1 POS 23 2ND LOOK	3703
190	REFL 2 POS 6 2ND LOOK	15895	768	REFL 2 POS 23 2ND LOOK	15891
192	NADIR SAMPLE 6	16390	770	NADIR SAMPLE 23	16391
	CH 3	15564		CH 3	15566
	CH 4			CH 4	
	CH 5			CH 5	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17127	772	CH 6	17122
196	CH 7	15546	774	CH 7	15544
198	CH 8	16546	776	CH 8	16552
200	CH 9	16336	778	CH 9	16337
202	CH 10	16509	780	CH 10	16511
204	CH 11	17524	782	CH 11	17528
206	CH 12	17679	784	CH 12	17679
208	CH 13	17558	786	CH 13	17553
210	CH 14	19267	788	CH 14	19239
212	CH 15	16461	790	CH 15	16460
214	REFLECTOR 1 POSITION 7	4050	792	REFLECTOR 1 POSITION 24	4050
216	REFLECTOR 2 POSITION 7	3703	794	REFLECTOR 2 POSITION 24	3703
218	REFL 1 POS 7 2ND LOOK	4050	796	REFL 1 POS 24 2ND LOOK	4050
220	REFL 2 POS 7 2ND LOOK	3703	798	REFL 2 POS 24 2ND LOOK	3703
222	NADIR SAMPLE 7	15892	800	NADIR SAMPLE 24	15893
224	CH 3	16391	802	CH 3	16386
226	CH 4	15568	804	CH 4	15565
228	CH 5	17129	806	CH 5	17129
230	CH 6	15545	808	CH 6	15544
232	CH 7	16550	810	CH 7	16553
234	CH 8	16337	812	CH 8	16331
236	CH 9	16511	814	CH 9	16513
238	CH 10	17532	816	CH 10	17528
240	CH 11	17681	818	CH 11	17679
242	CH 12	17553	820	CH 12	17564
244	CH 13	19260	822	CH 13	19268
246	CH 14	16462	824	CH 14	16460
248	CH 15	4050	826	CH 15	4050
250	REFLECTOR 1 POSITION 8	3703	828	REFLECTOR 1 POSITION 25	3702
252	REFLECTOR 2 POSITION 8	4050	830	REFLECTOR 2 POSITION 25	4050
254	REFL 1 POS 8 2ND LOOK	3703	832	REFL 1 POS 25 2ND LOOK	3703
256	REFL 2 POS 8 2ND LOOK	15889	834	REFL 2 POS 25 2ND LOOK	15896
258	NADIR SAMPLE 8	16394	836	NADIR SAMPLE 25	16393
260	CH 3	15566	838	CH 3	15563
262	CH 4	17127	840	CH 4	17127
264	CH 5	15544	842	CH 5	15547
266	CH 6	16551	844	CH 6	16550
268	CH 7	16337	846	CH 7	16336
270	CH 8	16510	848	CH 8	16511
272	CH 9	17530	850	CH 9	17523
274	CH 10	17682	852	CH 10	17671
276	CH 11	17554	854	CH 11	17559
278	CH 12	19269	856	CH 12	19257
280	CH 13	16460	858	CH 13	16461
282	CH 14	4050	860	CH 14	4050
284	CH 15	3703	862	CH 15	3703
286	REFLECTOR 1 POSITION 9	3703	864	REFLECTOR 1 POSITION 26	4050
288	REFLECTOR 2 POSITION 9	4050	866	REFLECTOR 2 POSITION 26	3703
290	REFL 1 POS 9 2ND LOOK	3703	868	REFL 1 POS 26 2ND LOOK	15895
292	REFL 2 POS 9 2ND LOOK	15894	870	REFL 2 POS 26 2ND LOOK	16388
	NADIR SAMPLE 9	16395		NADIR SAMPLE 26	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15566	872	REFLECTOR 1 POSITION 27	4050
296	CH 6	17126	874	REFLECTOR 2 POSITION 27	3703
298	CH 7	15542	876	REFL 1 POS 27 2ND LOOK	3703
300	CH 8	16550	878	REFL 2 POS 27 2ND LOOK	3703
302	CH 9	16333	880	NADIR SAMPLE 27	15891
304	CH 10	16514	882	CH 3	16388
306	CH 11	17528	884	CH 4	15567
308	CH 12	17681	886	CH 5	17122
310	CH 13	17554	888	CH 6	15544
312	CH 14	19258	890	CH 7	16550
314	CH 15	16461	892	CH 8	16336
316	REFLECTOR 1 POSITION 10	4050	894	CH 9	16512
318	REFLECTOR 2 POSITION 10	3703	896	CH 10	17530
320	REFL 1 POS 10 2ND LOOK	4050	898	CH 11	17674
322	REFL 2 POS 10 2ND LOOK	3703	900	CH 12	17561
324	NADIR SAMPLE 10	15900	902	CH 13	19241
326	CH 3	16393	904	CH 14	16462
328	CH 4	15565	906	CH 15	4050
330	CH 5	17125	908	REFLECTOR 1 POSITION 28	3703
332	CH 6	15541	910	REFLECTOR 2 POSITION 28	3703
334	CH 7	16551	912	REFL 1 POS 28 2ND LOOK	4050
336	CH 8	16336	914	REFL 2 POS 28 2ND LOOK	3703
338	CH 9	16508	916	NADIR SAMPLE 28	15892
340	CH 10	17529	918	CH 3	16390
342	CH 11	17689	920	CH 4	15566
344	CH 12	17556	922	CH 5	17128
346	CH 13	19261	924	CH 6	15543
348	CH 14	16463	926	CH 7	16554
350	CH 15	4050	928	CH 8	16337
352	REFLECTOR 1 POSITION 11	3703	930	CH 9	16509
354	REFLECTOR 2 POSITION 11	4050	932	CH 10	17526
356	REFL 1 POS 11 2ND LOOK	3703	934	CH 11	17669
358	REFL 2 POS 11 2ND LOOK	15891	936	CH 12	17556
360	NADIR SAMPLE 11	16391	938	CH 13	19242
362	CH 3	15568	940	CH 14	16461
364	CH 4	17126	942	CH 15	4050
366	CH 5	15546	944	REFLECTOR 1 POSITION 29	3703
368	CH 6	16548	946	REFLECTOR 2 POSITION 29	3703
370	CH 7	16334	948	REFL 1 POS 29 2ND LOOK	4050
372	CH 8	16510	950	REFL 2 POS 29 2ND LOOK	3703
374	CH 9	17529	952	NADIR SAMPLE 29	15893
376	CH 10	17675	954	CH 3	
378	CH 11	17559	956	CH 4	
380	CH 12	19268	958	CH 5	
382	CH 13	16462	960	CH 6	
384	CH 14	4050	962	CH 7	
386	CH 15	3703	964	CH 8	
388	REFLECTOR 1 POSITION 12	3703	966	CH 9	
390	REFLECTOR 2 POSITION 12	4050	968	CH 10	
392	REFL 1 POS 12 2ND LOOK	4050	970	CH 11	
	REFL 2 POS 12 2ND LOOK	3703		CH 12	
	NADIR SAMPLE 12	15895		CH 13	
	CH 3			CH 14	
	CH 4			CH 15	
	CH 5				
	CH 6				
	CH 7				
	CH 8				
	CH 9				
	CH 10				
	CH 11				
	CH 12				
	CH 13				
	CH 14				
	CH 15				
	REFLECTOR 1 POSITION 12				
	REFLECTOR 2 POSITION 12				
	REFL 1 POS 12 2ND LOOK				
	REFL 2 POS 12 2ND LOOK				
	NADIR SAMPLE 12				
	CH 3				

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16392	972	CH 4	16389
396	CH 5	15565	974	CH 5	15564
398	CH 6	17127	976	CH 6	17125
400	CH 7	15543	978	CH 7	15546
402	CH 8	16551	980	CH 8	16548
404	CH 9	16336	982	CH 9	16332
406	CH 10	16508	984	CH 10	16511
408	CH 11	17529	986	CH 11	17530
410	CH 12	17671	988	CH 12	17678
412	CH 13	17569	990	CH 13	17554
414	CH 14	19240	992	CH 14	19265
416	CH 15	16460	994	CH 15	16460
418	REFLECTOR 1 POSITION 13	4050	996	REFLECTOR 1 POSITION 30	4050
420	REFLECTOR 2 POSITION 13	3703	998	REFLECTOR 2 POSITION 30	3703
422	REFL 1 POS 13 2ND LOOK	4050	1000	REFL 1 POS 30 2ND LOOK	4050
424	REFL 2 POS 13 2ND LOOK	3703	1002	REFL 2 POS 30 2ND LOOK	3703
426	NADIR SAMPLE 13	15886	1004	NADIR SAMPLE 30	15892
428	CH 4	16392	1006	CH 4	16393
430	CH 5	15566	1008	CH 5	15567
432	CH 6	17128	1010	CH 6	17122
434	CH 7	15544	1012	CH 7	15545
436	CH 8	16546	1014	CH 8	16550
438	CH 9	16332	1016	CH 9	16334
440	CH 10	16515	1018	CH 10	16511
442	CH 11	17525	1020	CH 11	17533
444	CH 12	17676	1022	CH 12	17667
446	CH 13	17562	1024	CH 13	17564
448	CH 14	19276	1026	CH 14	19233
450	CH 15	16461	1028	CH 15	16461
452	REFLECTOR 1 POSITION 14	4050	1030	REFLECTOR 1 COLD CAL POS	OE
454	REFLECTOR 2 POSITION 14	3703	1032	REFLECTOR 2 COLD CAL POS	OE
456	REFL 1 POS 14 2ND LOOK	4050	1034	REFL 1 COLD CAL 2ND LOOK	OE
458	REFL 2 POS 14 2ND LOOK	3703	1036	REFL 2 COLD CAL 2ND LOOK	OE
460	NADIR SAMPLE 14	15894	1038	COLD CAL DATA 1	0
462	CH 3	16391	1040	CH 3	0
464	CH 4	15566	1042	CH 4	0
466	CH 5	17123	1044	CH 5	0
468	CH 6	15543	1046	CH 6	0
470	CH 7	16553	1048	CH 7	0
472	CH 8	16336	1050	CH 8	0
474	CH 9	16512	1052	CH 9	0
476	CH 10	17528	1054	CH 10	0
478	CH 11	17668	1056	CH 11	0
480	CH 12	17557	1058	CH 12	0
482	CH 13	19253	1060	CH 13	0
484	CH 14	16461	1062	CH 14	0
486	CH 15	4050	1064	CH 15	0
488	REFLECTOR 1 POSITION 15	3703	1066	COLD CAL DATA 2	0
490	REFLECTOR 2 POSITION 15	4050	1068	CH 3	0
492	REFL 1 POS 15 2ND LOOK	3703	1070	CH 4	0
	REFL 2 POS 15 2ND LOOK			CH 5	0
				CH 6	0

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	NADIR SAMPLE 15	CH 3	1072		
496		CH 4	15889		
498		CH 5	16393		
500		CH 6	1074		
502		CH 7	15566		
504		CH 8	17125		
506		CH 9	1078		
508		CH 10	15545		
510		CH 11	1080		
512		CH 12	16549		
514		CH 13	1082		
516		CH 14	16335		
518		CH 15	1084		
520			16515		
522	REFLECTOR 1 POSITION 16	CH 16	17528		
524	REFLECTOR 2 POSITION 16	CH 17	1088		
526	REFL 1 POS 16 2ND LOOK	CH 18	1182		
528	REFL 2 POS 16 2ND LOOK	CH 19	1184		
530	NADIR SAMPLE 16	CH 20	19236		
532		CH 21	1186		
534		CH 22	16459		
536		CH 23	4050		
538		CH 24	3703		
540		CH 25	1192		
542		CH 26	1194		
544		CH 27	1196		
546		CH 28	15895		
548		CH 29	16392		
550		CH 30	1200		
552		CH 31	17127		
554		CH 32	1202		
556		CH 33	17127		
558		CH 34	1204		
560		CH 35	15543		
562		CH 36	1206		
564		CH 37	16550		
566		CH 38	1208		
568		CH 39	16335		
570		CH 40	1210		
		CH 41	16508		
		CH 42	1212		
		CH 43	17521		
		CH 44	1214		
		CH 45	17679		
		CH 46	1216		
		CH 47	17552		
		CH 48	1218		
		CH 49	19247		
		CH 50	16461		
		CH 51	1222		
		CH 52	1224		
		CH 53	4050		
		CH 54	3703		
		CH 55	1226		
		CH 56	4050		
		CH 57	1228		
		CH 58	3703		
		CH 59	1230		
		CH 60	15893		
		CH 61	1232		
		CH 62	16388		
		CH 63	1234		
		CH 64	15568		
		CH 65	1236		
		CH 66	17126		
		CH 67	15543		
		CH 68	1240		
		CH 69			
		CH 70			
		CH 71			
		CH 72			
		CH 73			
		CH 74			
		CH 75			
		CH 76			
		CH 77			
		CH 78			
		CH 79			
		CH 80			
		CH 81			
		CH 82			
		CH 83			
		CH 84			
		CH 85			
		CH 86			
		CH 87			
		CH 88			
		CH 89			
		CH 90			
		CH 91			
		CH 92			
		CH 93			
		CH 94			
		CH 95			
		CH 96			
		CH 97			
		CH 98			
		CH 99			
		CH 100			
		CH 101			
		CH 102			
		CH 103			
		CH 104			
		CH 105			
		CH 106			
		CH 107			
		CH 108			
		CH 109			
		CH 110			
		CH 111			
		CH 112			
		CH 113			
		CH 114			
		CH 115			
		CH 116			
		CH 117			
		CH 118			
		CH 119			
		CH 120			
		CH 121			
		CH 122			
		CH 123			
		CH 124			
		CH 125			
		CH 126			
		CH 127			
		CH 128			
		CH 129			
		CH 130			
		CH 131			
		CH 132			
		CH 133			
		CH 134			
		CH 135			
		CH 136			
		CH 137			
		CH 138			
		CH 139			
		CH 140			
		CH 141			
		CH 142			
		CH 143			
		CH 144			
		CH 145			
		CH 146			
		CH 147			
		CH 148			
		CH 149			
		CH 150			
		CH 151			
		CH 152			
		CH 153			
		CH 154			
		CH 155			
		CH 156			
		CH 157			
		CH 158			
		CH 159			
		CH 160			
		CH 161			
		CH 162			
		CH 163			
		CH 164			
		CH 165			
		CH 166			
		CH 167			
		CH 168			
		CH 169			
		CH 170			
		CH 171			
		CH 172			
		CH 173			
		CH 174			
		CH 175			
		CH 176			
		CH 177			
		CH 178			
		CH 179			
		CH 180			
		CH 181			
		CH 182			
		CH 183			
		CH 184			
		CH 185			
		CH 186			
		CH 187			
		CH 188			
		CH 189			
		CH 190			
		CH 191			
		CH 192			
		CH 193			
		CH 194			
		CH 195			
		CH 196			
		CH 197			
		CH 198			
		CH 199			
		CH 200			
		CH 201			
		CH 202			
		CH 203			
		CH 204			
		CH 205			
		CH 206			
		CH 207			
		CH 208			
		CH 209			
		CH 210			
		CH 211			
		CH 212			
		CH 213			
		CH 214			
		CH 215			
		CH 216			
		CH 217			
		CH 218			
		CH 219			
		CH 220			
		CH 221			
		CH 222			
		CH 223			
		CH 224			
		CH 225			
		CH 226			
		CH 227			
		CH 228			
		CH 229			
		CH 230			
		CH 231			
		CH 232			
		CH 233			
		CH 234			
		CH 235			
		CH 236			
		CH 237			
		CH 238			
		CH 239			
		CH 240			
		CH 241			
		CH 242			
		CH 243			
		CH 244			
		CH 245			
		CH 246			
		CH 247			
		CH 248			
		CH 249			
		CH 250			
		CH 251			
		CH 252			
		CH 253			
		CH 254			
		CH 255			
		CH 256			
		CH 257			
		CH 258			
		CH 259			
		CH 260			
		CH 261			
		CH 262			
		CH 263			
		CH 264			
		CH 265			
		CH 266			
		CH 267			
		CH 268			
		CH 269			
		CH 270			
		CH 271			
		CH 272			
		CH 273			
		CH 274			
		CH 275			
		CH 276			
		CH 277			
		CH 278			
		CH 279			
		CH 280			
		CH 281			
		CH 282			
		CH 283			
		CH 284			
		CH 285			
		CH 286			
		CH 287			
		CH 288			
		CH 289			
		CH 290			
		CH 291			
		CH 292			
		CH 293			
		CH 294			
		CH 295			
		CH 296			
		CH 297			
		CH 298			
		CH 299			
		CH 300			
		CH 301			
		CH 302			
		CH 303			
		CH 304			
		CH 305			
		CH 306			
		CH 307			
		CH 308			
		CH 309			
		CH 310			
		CH 311			
		CH 312			
		CH 313			
		CH 314			
		CH 315			
		CH 316			
		CH 317			
		CH 318			
		CH 319			
		CH 320			
		CH 321			
		CH 322			
		CH 323			
		CH 324			
		CH 325			
		CH 326			
		CH 327			
		CH 328			
		CH 329			
		CH 330			
		CH 331			
		CH 332			
		CH 333			
		CH 334			
		CH 335			
		CH 336			
		CH 337			
		CH 338			
		CH 339			
		CH 340			
		CH 341			
		CH 342			
		CH 343			
		CH 344			
		CH 345			
		CH 346			

SCIENCE DATA  
NADIR MODE

VALUE TEMPERATURE DEG C

ELEMENT DESCRIPTION

1090	SCAN MOTOR A1-1	18479	23.83
1092	SCAN MOTOR A1-2	19935	25.90
1094	FEED HORN A1-1	20910	28.81
1096	FEED HORN A1-2	22143	31.23
1098	RF MUX A1-1	23144	32.96
1100	RF MUX A1-2	24531	35.79
1102	LOCAL OSCILLATOR CHANNEL 3	25485	37.85
1104	LOCAL OSCILLATOR CHANNEL 4	25892	37.96
1106	LOCAL OSCILLATOR CHANNEL 5	24696	36.28
1108	LOCAL OSCILLATOR CHANNEL 6	23359	32.75
1110	LOCAL OSCILLATOR CHANNEL 7	23876	34.48
1112	LOCAL OSCILLATOR CHANNEL 8	25271	37.27
1114	LOCAL OSCILLATOR CHANNEL 15	24950	36.17
1116	PLLO #2	23142	32.98
1118	PLLO #1	26061	38.70
1120	1553 INTERFACE	19112	38.20
1122	MIXER/IF AMPLIFIER CHANNEL 3	24844	36.32
1124	MIXER/IF AMPLIFIER CHANNEL 4	25006	36.16
1126	MIXER/IF AMPLIFIER CHANNEL 5	24592	35.75
1128	MIXER/IF AMPLIFIER CHANNEL 6	23455	33.55
1130	MIXER/IF AMPLIFIER CHANNEL 7	23483	34.16
1132	MIXER/IF AMPLIFIER CHANNEL 8	24931	36.36
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	22917	32.74
1136	MIXER/IF AMPLIFIER CHANNEL 15	24709	36.23
1138	IF AMPLIFIER CHANNEL 11 THRU 14	24457	35.54
1140	IF AMPLIFIER CHANNEL 9	24643	35.80
1142	IF AMPLIFIER CHANNEL 10	24489	35.77
1144	IF AMPLIFIER CHANNEL 11	23646	33.28
1146	DC/DC CONVERTER	25949	37.77
1148	IF AMPLIFIER CHANNEL 13	23223	32.57
1150	IF AMPLIFIER CHANNEL 14	23584	33.71
1152	IF AMPLIFIER CHANNEL 12	23395	33.14
1154	RF SHELF A1-1	23884	34.37
1156	RF SHELF A1-2	24597	35.14
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	21491	29.78
1160	A1-1 WARM LOAD 1	24150	25.28
1162	A1-1 WARM LOAD 2	24656	25.41
1164	A1-1 WARM LOAD 3	24149	25.43
1166	A1-1 WARM LOAD 4	24230	25.41
1168	A1-1 WARM LOAD CENTER	24423	25.41
1170	A1-2 WARM LOAD 1	25610	27.64
1172	A1-2 WARM LOAD 2	25666	27.66
1174	A1-2 WARM LOAD 3	25674	27.65
1176	A1-2 WARM LOAD 4	25670	27.54
1178	A1-2 WARM LOAD CENTER	25681	27.65
1180	TEMP SENSOR REFERENCE VOLTAGE	25273	

DESCRIPTION	STATUS
ANTENNA IN FULL SCAN MODE	NO
ANTENNA IN WARM CAL MODE	NO
ANTENNA IN COLD CAL MODE	YES
ANTENNA IN NADIR MODE	NO
COLD CAL. POSITION LSB	ONE
COLD CAL. POSITION MSB	ZERO
PLO REDUNDANCY	PILLO # 1
SCANNER A1-1 POWER	ON
SCANNER A1-2 POWER	ON
PILLO #1 LOCK	YES
PILLO #2 LOCK	OFF
ADC LATCHUP FLAG	ONE

ENGINEERING DATA		DEG C
AL-1	SCANNER MOTOR TEMPERATURE	23.3
AL-1	RF SHELF TEMPERATURE #1	31.0
AL-1	WARM LOAD TEMPERATURE	24.5
AL-2	SCANNER MOTOR TEMPERATURE	26.1
AL-2	RF SHELF TEMPERATURE #1	35.5
AL-2	WARM LOAD TEMPERATURE	26.9
AL-1	RF SHELF TEMPERATURE #2	30.9
AL-2	RF SHELF TEMPERATURE #2	35.1
DESCRIPTION		MA/VOLTS
SIGNAL PROCESSOR		22052
		21834
SCAN DRIVE		21800
		22184
PLO		22211
		21857
		22555
		22078
RECEIVER		21813
MIXER/IF AMPLIFIER A1-1		21416
A1-2		21428
LO CHANNEL 6		21392
7		21454
SPARE		32767
LO CHANNEL 3		21248
4		21178
5		21379
8		21313
15		22015
QUIET BUS CURRENT		16300
AL-1 NOISY POWER BUS CURRENT		125
AL-2 NOISY POWER BUS CURRENT		101

AZONIX DATA  
NADIR MODE

EOS A1\_03 E1.EXE;40

PRT TEMPERATURES

VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

FIXED TARGET

BASEPLATE

THERMOCOUPLE TEMPERATURES

FIXED TARGET SHROUD

VARIABLE TARGET SHROUD

FIXED TARGET N2

VARIABLE TARGET N2

HEATER N2

FIXED TARGET FLOW METER  
VARIABLE TARGET FLOW METER  
BASEPLATE HEATER N2  
BASEPLATE N2  
BASEPLATE FLOW METER  
ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00



EOS A1-03 E1-EXE;40 COLD CAL MODE  
 [ 5 ] SCIENCE DATA ELEMENT 0000  
 [ 6 ] CONTROL/STATUS ELEMENT 00  
 [ 7 ] ENGINEERING ELEMENT 00

P1 13-NOV-98 17:24:59 SCAN NUMBER 903

COMMANDS  
 [ 9 ] SCANNER A1-1 POWER = ON PLO POWER = PLO#1 [ 15 ]  
 [ 10 ] SCANNER A1-2 POWER = ON COLD CAL POSITION 1 = NO [ 16 ]  
 [ 11 ] ANTENNA FULL SCAN MODE = NO 2 = NO [ 17 ]  
 [ 12 ] WARM CAL 3 = YES [ 18 ]  
 [ 13 ] COLD CAL COLD CAL POSITION 4 = NO [ 19 ]  
 [ 14 ] NADIR RESET C&DH PROCESSOR [ 20 ]  
 ENGR OK POWER ON CHECKSUM IN FFC5 CALC FFC5 SA28 2106 SA29 4197  
 SELECT BUTTON 3 SCREEN ONLY [ 2 ] PRINT [ 3 ] FULL [ 1 ] RETURN [ 21 ]

Parag. 3.3.5.3.3 step 19 Cold Cal 3  
 Support TDS 11 of AEE 26156/9  
 Final CPY - EOS/AMSR-A1 S/N 202  
 9/0 560863 open. 0580

SCIENCE DATA  
NADIR MODE

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	NADIR SAMPLE	16540
2		00000011	574		16315
3	PACKET LENGTH	00000010	576		16490
4		10111111	578		17489
5	UNIT SERIAL NUMBER	00000011	580		17638
6		00000000	582		17514
7	INSTRUMENT MODE/STATUS	10011010	584		19199
8		01001000	586		16443
10	REFLECTOR 1 POSITION	3975	588	REFLECTOR 1 POSITION 18	3975
12	REFLECTOR 2 POSITION	3627	590	REFLECTOR 2 POSITION 18	3627
14	REFL 1 POS 1 2ND LOOK	3975	592	REFL 1 POS 18 2ND LOOK	3975
16	REFL 2 POS 1 2ND LOOK	3627	594	REFL 2 POS 18 2ND LOOK	3627
18	NADIR SAMPLE	15891	596	NADIR SAMPLE	15895
20		16381	598		16382
22		15559	600		15562
24		17107	602		17109
26		15519	604		15520
28		16546	606		16547
30		16312	608		16313
32		16487	610		16488
34		17492	612		17493
36		17634	614		17640
38		17517	616		17512
40		19195	618		19188
42		16442	620		16444
44	REFLECTOR 1 POSITION	3975	622	REFLECTOR 1 POSITION 19	3975
46	REFLECTOR 2 POSITION	3627	624	REFLECTOR 2 POSITION 19	3627
48	REFL 1 POS 2 2ND LOOK	3975	626	REFL 1 POS 19 2ND LOOK	3975
50	REFL 2 POS 2 2ND LOOK	3627	628	REFL 2 POS 19 2ND LOOK	3627
52	NADIR SAMPLE	15889	630	NADIR SAMPLE	15894
54		16382	632		16384
56		15560	634		15560
58		17107	636		17106
60		15523	638		15526
62		16546	640		16545
64		16311	642		16313
66		16490	644		16488
68		17490	646		17488
70		17640	648		17639
72		17513	650		17525
74		19201	652		19200
76		16444	654		16443
78	REFLECTOR 1 POSITION	3975	656	REFLECTOR 1 POSITION 20	3975
80	REFLECTOR 2 POSITION	3627	658	REFLECTOR 2 POSITION 20	3627
82	REFL 1 POS 3 2ND LOOK	3975	660	REFL 1 POS 20 2ND LOOK	3975
84	REFL 2 POS 3 2ND LOOK	3627	662	REFL 2 POS 20 2ND LOOK	3627
86	NADIR SAMPLE	15895	664	NADIR SAMPLE	15892
88		16380	666		16384
90		15559	668		15559
92		17106	670		17105

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15525	672	CH 7	15527
96	CH 8	16546	674	CH 8	16543
98	CH 9	16316	676	CH 9	16316
100	CH 10	16487	678	CH 10	16486
102	CH 11	17488	680	CH 11	17489
104	CH 12	17631	682	CH 12	17641
106	CH 13	17506	684	CH 13	17527
108	CH 14	19212	686	CH 14	19222
110	CH 15	16445	688	CH 15	16442
112	REFLECTOR 1 POSITION 4	3975	690	REFLECTOR 1 POSITION 21	3975
114	REFLECTOR 2 POSITION 4	3627	692	REFLECTOR 2 POSITION 21	3627
116	REFL 1 POS 4 2ND LOOK	3975	694	REFL 1 POS 21 2ND LOOK	3627
118	REFL 2 POS 4 2ND LOOK	3627	696	REFL 2 POS 21 2ND LOOK	3975
120	NADIR SAMPLE 4	15889	698	NADIR SAMPLE 21	3627
122	CH 3	16379	700	CH 3	15895
124	CH 4	15561	702	CH 4	16382
126	CH 5	17106	704	CH 5	15558
128	CH 6	15523	706	CH 6	17105
130	CH 7	16542	708	CH 7	15524
132	CH 8	16313	710	CH 8	16541
134	CH 9	16484	712	CH 9	16311
136	CH 10	17485	714	CH 10	16488
138	CH 11	17638	716	CH 11	17488
140	CH 12	17512	718	CH 12	17646
142	CH 13	19201	720	CH 13	17509
144	CH 14	16444	722	CH 14	19209
146	CH 15	3975	724	CH 15	16441
148	REFLECTOR 1 POSITION 5	3627	726	REFLECTOR 1 POSITION 22	3975
150	REFLECTOR 2 POSITION 5	3627	728	REFLECTOR 2 POSITION 22	3627
152	REFL 1 POS 5 2ND LOOK	3975	730	REFL 1 POS 22 2ND LOOK	3975
154	REFL 2 POS 5 2ND LOOK	3627	732	REFL 2 POS 22 2ND LOOK	3627
156	NADIR SAMPLE 5	15896	734	NADIR SAMPLE 22	3627
158	CH 3	16378	736	CH 3	15901
160	CH 4	15561	738	CH 4	16379
162	CH 5	17112	740	CH 5	15563
164	CH 6	15524	742	CH 6	17108
166	CH 7	16547	744	CH 7	15525
168	CH 8	16316	746	CH 8	16546
170	CH 9	16488	748	CH 9	16312
172	CH 10	17488	750	CH 10	16488
174	CH 11	17639	752	CH 11	17494
176	CH 12	17518	754	CH 12	17644
178	CH 13	19210	756	CH 13	17523
180	CH 14	16445	758	CH 14	19212
182	CH 15	3975	760	CH 15	16443
184	REFLECTOR 1 POSITION 6	3975	762	REFLECTOR 1 POSITION 23	3975
186	REFLECTOR 2 POSITION 6	3627	764	REFLECTOR 2 POSITION 23	3627
188	REFL 1 POS 6 2ND LOOK	3975	766	REFL 1 POS 23 2ND LOOK	3975
190	REFL 2 POS 6 2ND LOOK	3627	768	REFL 2 POS 23 2ND LOOK	3627
192	NADIR SAMPLE 6	15892	770	NADIR SAMPLE 23	15891
	CH 3	16378		CH 3	16379
	CH 4	15561		CH 4	15558
	CH 5			CH 5	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17109	772	CH 6	17107
196	CH 7	15525	774	CH 7	15525
198	CH 8	16545	776	CH 8	16546
200	CH 9	16314	778	CH 9	16312
202	CH 10	16486	780	CH 10	16493
204	CH 11	17487	782	CH 11	17493
206	CH 12	17641	784	CH 12	17641
208	CH 13	17515	786	CH 13	17518
210	CH 14	19209	788	CH 14	19207
212	CH 15	16443	790	CH 15	16443
214	REFLECTOR 1 POSITION 7	3975	792	REFLECTOR 1 POSITION 24	3975
216	REFLECTOR 2 POSITION 7	3627	794	REFLECTOR 2 POSITION 24	3627
218	REFL 1 POS 7 2ND LOOK	3975	796	REFL 1 POS 24 2ND LOOK	3975
220	REFL 2 POS 7 2ND LOOK	3627	798	REFL 2 POS 24 2ND LOOK	3627
222	NADIR SAMPLE 7	15895	800	NADIR SAMPLE 24	15895
224	CH 3	16379	802	CH 3	16380
226	CH 4	15563	804	CH 4	15560
228	CH 5	17109	806	CH 5	17106
230	CH 6	15523	808	CH 6	15522
232	CH 7	16548	810	CH 7	16546
234	CH 8	16313	812	CH 8	16313
236	CH 9	16486	814	CH 9	16486
238	CH 10	17488	816	CH 10	17486
240	CH 11	17639	818	CH 11	17627
242	CH 12	17519	820	CH 12	17516
244	CH 13	19176	822	CH 13	19223
246	CH 14	16443	824	CH 14	16444
248	CH 15	3975	826	CH 15	3975
250	REFLECTOR 1 POSITION 8	3627	828	REFLECTOR 1 POSITION 25	3627
252	REFLECTOR 2 POSITION 8	3975	830	REFLECTOR 2 POSITION 25	3975
254	REFL 1 POS 8 2ND LOOK	3627	832	REFL 1 POS 25 2ND LOOK	3627
256	REFL 2 POS 8 2ND LOOK	15883	834	REFL 2 POS 25 2ND LOOK	15890
258	NADIR SAMPLE 8	16382	836	NADIR SAMPLE 25	16380
260	CH 3	15560	838	CH 3	15562
262	CH 4	17106	840	CH 4	17109
264	CH 5	15521	842	CH 5	15526
266	CH 6	16542	844	CH 6	16543
268	CH 7	16313	846	CH 7	16311
270	CH 8	16486	848	CH 8	16482
272	CH 9	17489	850	CH 9	17496
274	CH 10	17640	852	CH 10	17635
276	CH 11	17512	854	CH 11	17506
278	CH 12	19202	856	CH 12	19201
280	CH 13	16443	858	CH 13	16443
282	CH 14	3975	860	CH 14	3975
284	CH 15	3627	862	CH 15	3627
286	REFLECTOR 1 POSITION 9	3975	864	REFLECTOR 1 POSITION 26	3975
288	REFLECTOR 2 POSITION 9	3627	866	REFLECTOR 2 POSITION 26	3627
290	REFL 1 POS 9 2ND LOOK	15887	868	REFL 1 POS 26 2ND LOOK	15895
292	REFL 2 POS 9 2ND LOOK	16380	870	REFL 2 POS 26 2ND LOOK	16381
	NADIR SAMPLE 9			NADIR SAMPLE 26	
	CH 3			CH 3	
	CH 4			CH 4	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15562	872		
296	CH 6	17110	874		15559
298	CH 7	15522	876		17107
300	CH 8	16544	878		15524
302	CH 9	16318	880		16542
304	CH 10	16487	882		16315
306	CH 11	17491	884		16485
308	CH 12	17639	886		17491
310	CH 13	17524	888		17651
312	CH 14	19194	890		17528
314	CH 15	16443	892		19215
316	REFLECTOR 1 POSITION 10	3975	894	REFLECTOR 1 POSITION 27	16444
318	REFLECTOR 2 POSITION 10	3627	896	REFLECTOR 2 POSITION 27	3975
320	REFL 1 POS 10 2ND LOOK	3975	898	REFL 1 POS 27 2ND LOOK	3626
322	REFL 2 POS 10 2ND LOOK	3627	900	REFL 2 POS 27 2ND LOOK	3975
324	NADIR SAMPLE 10	15892	902	NADIR SAMPLE 27	3627
326	CH 3	16384	904	CH 3	15895
328	CH 4	15561	906	CH 4	16378
330	CH 5	17107	908	CH 5	15560
332	CH 6	15523	910	CH 6	17107
334	CH 7	16545	912	CH 7	15522
336	CH 8	16314	914	CH 8	16546
338	CH 9	16485	916	CH 9	16312
340	CH 10	17499	918	CH 10	16485
342	CH 11	17629	920	CH 11	17490
344	CH 12	17523	922	CH 12	17637
346	CH 13	19194	924	CH 13	17532
348	CH 14	16444	926	CH 14	19210
350	CH 15	3975	928	CH 15	16444
352	REFLECTOR 1 POSITION 11	3627	930	REFLECTOR 1 POSITION 28	3975
354	REFLECTOR 2 POSITION 11	3975	932	REFLECTOR 2 POSITION 28	3627
356	REFL 1 POS 11 2ND LOOK	3627	934	REFL 1 POS 28 2ND LOOK	3975
358	REFL 2 POS 11 2ND LOOK	15891	936	REFL 2 POS 28 2ND LOOK	3627
360	NADIR SAMPLE 11	16382	938	NADIR SAMPLE 28	15893
362	CH 3	15560	940	CH 3	16379
364	CH 4	17112	942	CH 4	15558
366	CH 5	15523	944	CH 5	17107
368	CH 6	16543	946	CH 6	15527
370	CH 7	16313	948	CH 7	16545
372	CH 8	16484	950	CH 8	16314
374	CH 9	17493	952	CH 9	16482
376	CH 10	17636	954	CH 10	17491
378	CH 11	17509	956	CH 11	17646
380	CH 12	19193	958	CH 12	17516
382	CH 13	16443	960	CH 13	19217
384	CH 14	3975	962	CH 14	16441
386	CH 15	3627	964	CH 15	3975
388	REFLECTOR 1 POSITION 12	3627	966	REFLECTOR 1 POSITION 29	3627
390	REFLECTOR 2 POSITION 12	3975	968	REFLECTOR 2 POSITION 29	3975
392	REFL 1 POS 12 2ND LOOK	3627	970	REFL 1 POS 29 2ND LOOK	3627
	REFL 2 POS 12 2ND LOOK	15894		REFL 2 POS 29 2ND LOOK	15890
	NADIR SAMPLE 12			NADIR SAMPLE 29	
	CH 3			CH 3	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16381	972		16377
396	CH 5	15560	974		15557
398	CH 6	17106	976		17108
400	CH 7	15524	978		15524
402	CH 8	16543	980		16548
404	CH 9	16314	982		16316
406	CH 10	16485	984		16483
408	CH 11	17484	986		17490
410	CH 12	17631	988		17634
412	CH 13	17522	990		17510
414	CH 14	19200	992		19207
416	CH 15	16444	994		16443
418	REFLECTOR 1 POSITION 13	3975	996	REFLECTOR 1 POSITION 30	3975
420	REFLECTOR 2 POSITION 13	3627	998	REFLECTOR 2 POSITION 30	3627
422	REFL 1 POS 13 2ND LOOK	3975	1000	REFL 1 POS 30 2ND LOOK	3975
424	REFL 2 POS 13 2ND LOOK	3627	1002	REFL 2 POS 30 2ND LOOK	3627
426	NADIR SAMPLE 13	15893	1004	NADIR SAMPLE 30	15895
428	CH 4	16380	1006	CH 4	16379
430	CH 5	15558	1008	CH 5	15557
432	CH 6	17106	1010	CH 6	17106
434	CH 7	15525	1012	CH 7	15523
436	CH 8	16546	1014	CH 8	16544
438	CH 9	16313	1016	CH 9	16315
440	CH 10	16487	1018	CH 10	16481
442	CH 11	17490	1020	CH 11	17488
444	CH 12	17635	1022	CH 12	17643
446	CH 13	17511	1024	CH 13	17508
448	CH 14	19215	1026	CH 14	19204
450	CH 15	16444	1028	CH 15	16444
452	REFLECTOR 1 POSITION 14	3975	1030	REFLECTOR 1 COLD CAL POS	OE
454	REFLECTOR 2 POSITION 14	3627	1032	REFLECTOR 2 COLD CAL POS	OE
456	REFL 1 POS 14 2ND LOOK	3975	1034	REFL 1 COLD CAL 2ND LOOK	OE
458	REFL 2 POS 14 2ND LOOK	3627	1036	REFL 2 COLD CAL 2ND LOOK	OE
460	NADIR SAMPLE 14	15893	1038	COLD CAL DATA 1	0
462	CH 3	16381	1040	CH 3	0
464	CH 4	15559	1042	CH 4	0
466	CH 5	17103	1044	CH 5	0
468	CH 6	15523	1046	CH 6	0
470	CH 7	16545	1048	CH 7	0
472	CH 8	16314	1050	CH 8	0
474	CH 9	16484	1052	CH 9	0
476	CH 10	17481	1054	CH 10	0
478	CH 11	17634	1056	CH 11	0
480	CH 12	17532	1058	CH 12	0
482	CH 13	19211	1060	CH 13	0
484	CH 14	16445	1062	CH 14	0
486	CH 15	3975	1064	CH 15	0
488	REFLECTOR 1 POSITION 15	3627	1066	COLD CAL DATA 2	0
490	REFLECTOR 2 POSITION 15	3975	1068	CH 3	0
492	REFL 1 POS 15 2ND LOOK	3627	1070	CH 4	0
	REFL 2 POS 15 2ND LOOK	3627		CH 5	0
				CH 6	0

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	NADIR SAMPLE 15	CH 3			
496		CH 4	15893	1072	0
498		CH 5	16381	1074	0
500		CH 6	15560	1076	0
502		CH 7	17109	1078	0
504		CH 8	15523	1080	0
506		CH 9	16543	1082	0
508		CH 10	16313	1084	0
510		CH 11	16484	1086	0
512		CH 12	17487	1088	0
514		CH 13	17641	1182	0
516		CH 14	17519	1184	OE
518		CH 15	19217	1186	OE
520	REFLECTOR 1 POSITION 16	CH 16	16444	1188	OE
522	REFLECTOR 2 POSITION 16	CH 17	3975	1190	0
524	REFL 1 POS 16 2ND LOOK	CH 18	3627	1192	0
526	REFL 2 POS 16 2ND LOOK	CH 19	3975	1194	0
528	NADIR SAMPLE 16	CH 20	3627	1196	0
530		CH 21	15890	1198	0
532		CH 22	16383	1200	0
534		CH 23	15559	1202	0
536		CH 24	17108	1204	0
538		CH 25	15524	1206	0
540		CH 26	16544	1208	0
542		CH 27	16310	1210	0
544		CH 28	16487	1212	0
546		CH 29	17488	1214	0
548		CH 30	17638	1216	0
550		CH 31	17515	1218	0
552		CH 32	19203	1220	0
554	REFLECTOR 1 POSITION 17	CH 33	16444	1222	0
556	REFLECTOR 2 POSITION 17	CH 34	3975	1224	0
558	REFL 1 POS 17 2ND LOOK	CH 35	3627	1226	0
560	REFL 2 POS 17 2ND LOOK	CH 36	3975	1228	0
562	NADIR SAMPLE 17	CH 37	3627	1230	0
564		CH 38	15889	1232	0
566		CH 39	16380	1234	0
568		CH 40	15561	1236	0
570		CH 41	17105	1238	0
		CH 42	15522	1240	0

EOS A1\_03 EL.EXE;40 SCIENCE DATA  
NADIR MODE

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE	DEG C
1090	SCAN MOTOR A1-1	18512	23.89	
1092	SCAN MOTOR A1-2	19962	25.96	
1094	FEED HORN A1-1	20988	28.96	
1096	FEED HORN A1-2	22187	31.31	
1098	RF MUX A1-1	23219	33.10	
1100	RF MUX A1-2	24590	35.91	
1102	LOCAL OSCILLATOR CHANNEL 3	25541	37.96	
1104	LOCAL OSCILLATOR CHANNEL 4	25955	38.08	
1106	LOCAL OSCILLATOR CHANNEL 5	24761	36.41	
1108	LOCAL OSCILLATOR CHANNEL 6	23429	32.88	
1110	LOCAL OSCILLATOR CHANNEL 7	23951	34.63	
1112	LOCAL OSCILLATOR CHANNEL 8	25325	37.38	
1114	LOCAL OSCILLATOR CHANNEL 15	25026	36.32	
1116	PLLO #2	23218	33.13	
1118	PLLO #1	26136	38.84	
1120	1553 INTERFACE	19191	38.36	
1122	MIXER/IF AMPLIFIER CHANNEL 3	24906	36.44	
1124	MIXER/IF AMPLIFIER CHANNEL 4	25066	36.27	
1126	MIXER/IF AMPLIFIER CHANNEL 5	24648	35.86	
1128	MIXER/IF AMPLIFIER CHANNEL 6	23528	33.69	
1130	MIXER/IF AMPLIFIER CHANNEL 7	23559	34.31	
1132	MIXER/IF AMPLIFIER CHANNEL 8	24991	36.48	
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	22995	32.89	
1136	MIXER/IF AMPLIFIER CHANNEL 15	24782	36.37	
1138	IF AMPLIFIER CHANNEL 11 THRU 14	24532	35.69	
1140	IF AMPLIFIER CHANNEL 9	24720	35.95	
1142	IF AMPLIFIER CHANNEL 10	24565	35.92	
1144	IF AMPLIFIER CHANNEL 11	23723	33.43	
1146	DC/DC CONVERTER	25980	37.83	
1148	IF AMPLIFIER CHANNEL 13	23302	32.72	
1150	IF AMPLIFIER CHANNEL 14	23663	33.87	
1152	IF AMPLIFIER CHANNEL 12	23472	33.29	
1154	RF SHELF A1-1	23958	34.51	
1156	RF SHELF A1-2	24652	35.25	
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	21558	29.91	
1160	A1-1 WARM LOAD 1	24219	25.42	
1162	A1-1 WARM LOAD 2	24720	25.54	
1164	A1-1 WARM LOAD 3	24213	25.56	
1166	A1-1 WARM LOAD 4	24287	25.52	
1168	A1-1 WARM LOAD CENTER	24488	25.54	
1170	A1-2 WARM LOAD 1	25663	27.74	
1172	A1-2 WARM LOAD 2	25727	27.78	
1174	A1-2 WARM LOAD 3	25731	27.76	
1176	A1-2 WARM LOAD 4	25727	27.66	
1178	A1-2 WARM LOAD CENTER	25737	27.76	
1180	TEMP SENSOR REFERENCE VOLTAGE	25273		



## DESCRIPTION

## STATUS

ANTENNA IN FULL SCAN MODE	NO
ANTENNA IN WARM CAL MODE	NO
ANTENNA IN COLD CAL MODE	YES
ANTENNA IN NADIR MODE	NO
COLD CAL. POSITION LSB	ZERO
COLD CAL. POSITION MSB	ONE
PLO REDUNDANCY	PLO # 1
SCANNER A1-1 POWER	ON
SCANNER A1-2 POWER	ON
PLO #1 LOCK	YES
PLO #2 LOCK	OFF
ADC LATCHUP FLAG	ONE

## ENGINEERING DATA

## DESCRIPTION

## DEG C

A1-1 SCANNER MOTOR TEMPERATURE	23.3
A1-1 RF SHELF TEMPERATURE #1	31.0
A1-1 WARM LOAD TEMPERATURE	24.5
A1-2 SCANNER MOTOR TEMPERATURE	26.1
A1-2 RF SHELF TEMPERATURE #1	35.5
A1-2 WARM LOAD TEMPERATURE	26.9
A1-1 RF SHELF TEMPERATURE #2	30.9
A1-2 RF SHELF TEMPERATURE #2	35.1

VALUE  
MA/VOLTS

SIGNAL PROCESSOR	+5 VDC	22081	0.0
	+15 VDC	21836	0.0
	-15 VDC	21798	0.0
SCAN DRIVE	+5 VDC	22167	0.0
	+15 VDC	22220	0.0
	-15 VDC	21858	0.0
PLO	+15 VDC	22559	0.0
	-15 VDC	22079	0.0
RECEIVER	+8 VDC	21814	0.0
MIXER/IF AMPLIFIER A1-1	+10 VDC	21417	0.0
A1-2	+10 VDC	21429	0.0
LO CHANNEL 6	+10 VDC	21393	0.0
7	+10 VDC	21450	0.0
SPARE		32767	0.0
LO CHANNEL 3	+10 VDC	21253	0.0
4	+10 VDC	21183	0.0
5	+10 VDC	21377	0.0
8	+10 VDC	21307	0.0
15	+15 VDC	22016	0.0
QUIET BUS CURRENT		16352	0.0
A1-1 NOISY POWER BUS CURRENT		80	0.0
A1-2 NOISY POWER BUS CURRENT		57	0.0

PRT TEMPERATURES

VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

FIXED TARGET

BASEPLATE

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
	75.00	581	76.00

THERMOCOUPLE TEMPERATURES

FIXED TARGET SHROUD

VARIABLE TARGET SHROUD

FIXED TARGET N2

VARIABLE TARGET N2

HEATER N2

FIXED TARGET FLOW METER  
 VARIABLE TARGET FLOW METER  
 BASEPLATE HEATER N2  
 BASEPLATE N2  
 BASEPLATE FLOW METER  
 ADJUNCT RADIATORS

EOS A1-03 E1. EXE:40 COLD CAL MODE  
 [ 5 ] SCIENCE DATA ELEMENT 0000  
 [ 6 ] CONTROL/STATUS ELEMENT 00  
 [ 7 ] ENGINEERING ELEMENT 00  
 COMMANDS  
 [ 9 ] SCANNER A1-1 POWER = ON PLO POWER = PLO#1 [ 15 ]  
 [ 10 ] SCANNER A1-2 POWER = ON COLD CAL POSITION 1 = NO [ 16 ]  
 [ 11 ] ANTENNA FULL SCAN MODE = NO 2 = NO [ 17 ]  
 [ 12 ] WARM CAL = NO 3 = YES [ 18 ]  
 [ 13 ] COLD CAL = YES COLD CAL POSITION 4 = NO [ 19 ]  
 [ 14 ] NADIR = NO RESET C&DH PROCESSOR [ 20 ]  
 ENGR OK POWER ON CHECKSUM IN 4327 CALC 4327 SA28 2121 SA29 4227  
 SCREEN ONLY [ 2 ] PRINT [ 3 ] FULL [ 1 ] RETURN  
 SELECT BUTTON 3

Parag. 3.3.5.3.3 step 22 Cold Cal 2  
 Support TDS 11 of AE-26156/9  
 final CPT- Eos/ AMSU-A1 S/N 202  
 S/o 560863. oper. 0580

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	NADIR SAMPLE	17 CH 8
2		00000011	574		CH 9
3	PACKET LENGTH	00000010	576		CH 10
4		10111111	578		CH 11
5	UNIT SERIAL NUMBER	00000011	580		CH 12
6		00000000	582		CH 13
7	INSTRUMENT MODE/STATUS	10011010	584		CH 14
8		01001000	586		CH 15
10	REFLECTOR 1 POSITION	3975	588	REFLECTOR 1 POSITION	18
12	REFLECTOR 2 POSITION	3621	590	REFLECTOR 2 POSITION	18
14	REFL 1 POS	3975	592	REFL 1 POS	18
16	REFL 2 POS	3621	594	REFL 2 POS	18
18	NADIR SAMPLE	15888	596	NADIR SAMPLE	18
20		16376	598		CH 3
22		15561	600		CH 4
24		17106	602		CH 5
26		15521	604		CH 6
28		16543	606		CH 7
30		16313	608		CH 8
32		16491	610		CH 9
34		17485	612		CH 10
36		17638	614		CH 11
38		17525	616		CH 12
40		19191	618		CH 13
42		16442	620		CH 14
44	REFLECTOR 1 POSITION	3975	622	REFLECTOR 1 POSITION	19
46	REFLECTOR 2 POSITION	3621	624	REFLECTOR 2 POSITION	19
48	REFL 1 POS	3975	626	REFL 1 POS	19
50	REFL 2 POS	3621	628	REFL 2 POS	19
52	NADIR SAMPLE	15890	630	NADIR SAMPLE	19
54		16380	632		CH 3
56		15560	634		CH 4
58		17106	636		CH 5
60		15528	638		CH 6
62		16542	640		CH 7
64		16314	642		CH 8
66		16483	644		CH 9
68		17485	646		CH 10
70		17636	648		CH 11
72		17516	650		CH 12
74		19186	652		CH 13
76		16444	654		CH 14
78	REFLECTOR 1 POSITION	3975	656	REFLECTOR 1 POSITION	20
80	REFLECTOR 2 POSITION	3621	658	REFLECTOR 2 POSITION	20
82	REFL 1 POS	3975	660	REFL 1 POS	20
84	REFL 2 POS	3621	662	REFL 2 POS	20
86	NADIR SAMPLE	15889	664	NADIR SAMPLE	20
88		16382	666		CH 3
90		15558	668		CH 4
92		17109	670		CH 5
					CH 6
					CH 7
					CH 8
					CH 9
					CH 10
					CH 11
					CH 12
					CH 13
					CH 14
					CH 15
					CH 16
					CH 17
					CH 18
					CH 19
					CH 20
					CH 21
					CH 22
					CH 23
					CH 24
					CH 25
					CH 26
					CH 27
					CH 28
					CH 29
					CH 30
					CH 31
					CH 32
					CH 33
					CH 34
					CH 35
					CH 36
					CH 37
					CH 38
					CH 39
					CH 40
					CH 41
					CH 42
					CH 43
					CH 44
					CH 45
					CH 46
					CH 47
					CH 48
					CH 49
					CH 50
					CH 51
					CH 52
					CH 53
					CH 54
					CH 55
					CH 56
					CH 57
					CH 58
					CH 59
					CH 60
					CH 61
					CH 62
					CH 63
					CH 64
					CH 65
					CH 66
					CH 67
					CH 68
					CH 69
					CH 70
					CH 71
					CH 72
					CH 73
					CH 74
					CH 75
					CH 76
					CH 77
					CH 78
					CH 79
					CH 80
					CH 81
					CH 82
					CH 83
					CH 84
					CH 85
					CH 86
					CH 87
					CH 88
					CH 89
					CH 90
					CH 91
					CH 92

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15523	672	CH 7	15523
96	CH 8	16546	674	CH 8	16546
98	CH 9	16313	676	CH 9	16312
100	CH 10	16489	678	CH 10	16484
102	CH 11	17488	680	CH 11	17485
104	CH 12	17641	682	CH 12	17636
106	CH 13	17507	684	CH 13	17506
108	CH 14	19207	686	CH 14	19207
110	CH 15	16443	688	CH 15	16444
112	REFLECTOR 1 POSITION 4	3975	690	REFLECTOR 1 POSITION 21	3975
114	REFLECTOR 2 POSITION 4	3621	692	REFLECTOR 2 POSITION 21	3621
116	REFL 1 POS 4 2ND LOOK	3975	694	REFL 1 POS 21 2ND LOOK	3975
118	REFL 2 POS 4 2ND LOOK	3621	696	REFL 2 POS 21 2ND LOOK	3621
120	NADIR SAMPLE 4	15887	698	NADIR SAMPLE 21	15898
122	CH 3	16384	700	CH 3	16378
124	CH 4	15557	702	CH 4	15559
126	CH 5	17107	704	CH 5	17109
128	CH 6	15521	706	CH 6	15525
130	CH 7	16543	708	CH 7	16544
132	CH 8	16312	710	CH 8	16314
134	CH 9	16483	712	CH 9	16487
136	CH 10	17487	714	CH 10	17484
138	CH 11	17638	716	CH 11	17628
140	CH 12	17505	718	CH 12	17492
142	CH 13	19234	720	CH 13	19196
144	CH 14	16443	722	CH 14	16444
146	CH 15	3975	724	CH 15	3975
148	REFLECTOR 1 POSITION 5	3621	726	REFLECTOR 1 POSITION 22	3621
150	REFLECTOR 2 POSITION 5	3975	728	REFLECTOR 2 POSITION 22	3975
152	REFL 1 POS 5 2ND LOOK	3975	730	REFL 1 POS 22 2ND LOOK	3975
154	REFL 2 POS 5 2ND LOOK	3621	732	REFL 2 POS 22 2ND LOOK	3621
156	NADIR SAMPLE 5	15893	734	NADIR SAMPLE 22	15894
158	CH 3	16382	736	CH 3	16381
160	CH 4	15556	738	CH 4	15556
162	CH 5	17109	740	CH 5	17107
164	CH 6	15522	742	CH 6	15522
166	CH 7	16542	744	CH 7	16541
168	CH 8	16319	746	CH 8	16314
170	CH 9	16487	748	CH 9	16483
172	CH 10	17486	750	CH 10	17484
174	CH 11	17644	752	CH 11	17629
176	CH 12	17524	754	CH 12	17513
178	CH 13	19211	756	CH 13	19216
180	CH 14	16442	758	CH 14	16443
182	CH 15	3975	760	CH 15	3975
184	REFLECTOR 1 POSITION 6	3621	762	REFLECTOR 1 POSITION 23	3621
186	REFLECTOR 2 POSITION 6	3975	764	REFLECTOR 2 POSITION 23	3975
188	REFL 1 POS 6 2ND LOOK	3621	766	REFL 1 POS 23 2ND LOOK	3621
190	REFL 2 POS 6 2ND LOOK	15891	768	REFL 2 POS 23 2ND LOOK	15889
192	NADIR SAMPLE 6	16382	770	NADIR SAMPLE 23	16384
	CH 3	15554		CH 3	15558
	CH 4			CH 4	
	CH 5			CH 5	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17108	772	CH 6	17107
196	CH 7	15522	774	CH 7	15525
198	CH 8	16546	776	CH 8	16542
200	CH 9	16313	778	CH 9	16315
202	CH 10	16486	780	CH 10	16484
204	CH 11	17488	782	CH 11	17493
206	CH 12	17632	784	CH 12	17637
208	CH 13	17513	786	CH 13	17515
210	CH 14	19204	788	CH 14	19204
212	CH 15	16441	790	CH 15	16443
214	REFLECTOR 1 POSITION 7	3975	792	REFLECTOR 1 POSITION 24	3975
216	REFLECTOR 2 POSITION 7	3621	794	REFLECTOR 2 POSITION 24	3621
218	REFL 1 POS 7 2ND LOOK	3975	796	REFL 1 POS 24 2ND LOOK	3975
220	REFL 2 POS 7 2ND LOOK	3621	798	REFL 2 POS 24 2ND LOOK	3621
222	NADIR SAMPLE 7	15889	800	NADIR SAMPLE 24	15896
224	CH 3	16378	802	CH 3	16378
226	CH 4	15556	804	CH 4	15557
228	CH 5	17109	806	CH 5	17109
230	CH 6	15527	808	CH 6	15524
232	CH 7	16545	810	CH 7	16542
234	CH 8	16314	812	CH 8	16314
236	CH 9	16483	814	CH 9	16486
238	CH 10	17488	816	CH 10	17492
240	CH 11	17642	818	CH 11	17632
242	CH 12	17517	820	CH 12	17500
244	CH 13	19193	822	CH 13	19216
246	CH 14	16444	824	CH 14	16444
248	CH 15	3975	826	CH 15	3975
250	REFLECTOR 1 POSITION 8	3621	828	REFLECTOR 1 POSITION 25	3621
252	REFLECTOR 2 POSITION 8	3975	830	REFLECTOR 2 POSITION 25	3975
254	REFL 1 POS 8 2ND LOOK	3621	832	REFL 1 POS 25 2ND LOOK	3621
256	REFL 2 POS 8 2ND LOOK	15894	834	REFL 2 POS 25 2ND LOOK	15887
258	NADIR SAMPLE 8	16382	836	NADIR SAMPLE 25	16381
260	CH 3	15555	838	CH 3	15556
262	CH 4	17107	840	CH 4	17108
264	CH 5	15521	842	CH 5	15524
266	CH 6	16543	844	CH 6	16544
268	CH 7	16315	846	CH 7	16314
270	CH 8	16482	848	CH 8	16488
272	CH 9	17488	850	CH 9	17483
274	CH 10	17634	852	CH 10	17643
276	CH 11	17505	854	CH 11	17521
278	CH 12	19218	856	CH 12	19221
280	CH 13	16445	858	CH 13	16443
282	CH 14	3975	860	CH 14	3975
284	CH 15	3621	862	CH 15	3621
286	REFLECTOR 1 POSITION 9	3975	864	REFLECTOR 1 POSITION 26	3975
288	REFL 1 POS 9 2ND LOOK	3621	866	REFL 1 POS 26 2ND LOOK	3621
290	REFL 2 POS 9 2ND LOOK	15888	868	REFL 2 POS 26 2ND LOOK	15892
292	NADIR SAMPLE 9	16382	870	NADIR SAMPLE 26	16382

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15558	872	CH 5	15557
296	CH 6	17105	874	CH 6	17105
298	CH 7	15524	876	CH 7	15523
300	CH 8	16546	878	CH 8	16544
302	CH 9	16312	880	CH 9	16312
304	CH 10	16485	882	CH 10	16482
306	CH 11	17488	884	CH 11	17489
308	CH 12	17634	886	CH 12	17645
310	CH 13	17519	888	CH 13	17520
312	CH 14	19210	890	CH 14	19201
314	CH 15	16443	892	CH 15	16444
316	REFLECTOR 1 POSITION 10	3975	894	REFLECTOR 1 POSITION 27	3975
318	REFLECTOR 2 POSITION 10	3621	896	REFLECTOR 2 POSITION 27	3621
320	REFL 1 POS 10 2ND LOOK	3975	898	REFL 1 POS 27 2ND LOOK	3975
322	REFL 2 POS 10 2ND LOOK	3621	900	REFL 2 POS 27 2ND LOOK	3621
324	NADIR SAMPLE 10	15892	902	NADIR SAMPLE 27	15887
326	CH 3	16382	904	CH 3	16379
328	CH 4	15556	906	CH 4	15559
330	CH 5	17109	908	CH 5	17106
332	CH 6	15521	910	CH 6	15522
334	CH 7	16541	912	CH 7	16540
336	CH 8	16315	914	CH 8	16313
338	CH 9	16487	916	CH 9	16484
340	CH 10	17487	918	CH 10	17490
342	CH 11	17632	920	CH 11	17646
344	CH 12	17516	922	CH 12	17503
346	CH 13	19221	924	CH 13	19208
348	CH 14	16443	926	CH 14	16444
350	CH 15	3975	928	CH 15	3975
352	REFLECTOR 1 POSITION 11	3621	930	REFLECTOR 1 POSITION 28	3621
354	REFLECTOR 2 POSITION 11	3975	932	REFLECTOR 2 POSITION 28	3975
356	REFL 1 POS 11 2ND LOOK	3621	934	REFL 1 POS 28 2ND LOOK	3621
358	REFL 2 POS 11 2ND LOOK	15895	936	REFL 2 POS 28 2ND LOOK	15887
360	NADIR SAMPLE 11	16382	938	NADIR SAMPLE 28	16383
362	CH 3	15554	940	CH 3	15558
364	CH 4	17103	942	CH 4	17110
366	CH 5	15522	944	CH 5	15520
368	CH 6	16544	946	CH 6	16542
370	CH 7	16314	948	CH 7	16316
372	CH 8	16485	950	CH 8	16483
374	CH 9	17485	952	CH 9	17488
376	CH 10	17646	954	CH 10	17632
378	CH 11	17511	956	CH 11	17525
380	CH 12	19195	958	CH 12	19207
382	CH 13	16444	960	CH 13	16444
384	CH 14	3975	962	CH 14	3975
386	CH 15	3621	964	CH 15	3621
388	REFLECTOR 1 POSITION 12	3975	966	REFLECTOR 1 POSITION 29	3975
390	REFLECTOR 2 POSITION 12	3621	968	REFLECTOR 2 POSITION 29	3621
392	REFL 1 POS 12 2ND LOOK	15894	970	REFL 1 POS 29 2ND LOOK	15891
	REFL 2 POS 12 2ND LOOK			REFL 2 POS 29 2ND LOOK	
	NADIR SAMPLE 12			NADIR SAMPLE 29	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16381	972	CH 4	16379
396	CH 5	15559	974	CH 5	15557
398	CH 6	17106	976	CH 6	17106
400	CH 7	15525	978	CH 7	15523
402	CH 8	16544	980	CH 8	16541
404	CH 9	16314	982	CH 9	16318
406	CH 10	16491	984	CH 10	16482
408	CH 11	17484	986	CH 11	17486
410	CH 12	17630	988	CH 12	17643
412	CH 13	17525	990	CH 13	17504
414	CH 14	19190	992	CH 14	19216
416	CH 15	16443	994	CH 15	16445
418	REFLECTOR 1 POSITION 13	3975	996	REFLECTOR 1 POSITION 30	3975
420	REFLECTOR 2 POSITION 13	3621	998	REFLECTOR 2 POSITION 30	3621
422	REFL 1 POS 13 2ND LOOK	3975	1000	REFL 1 POS 30 2ND LOOK	3975
424	REFL 2 POS 13 2ND LOOK	3621	1002	REFL 2 POS 30 2ND LOOK	3621
426	NADIR SAMPLE 13	15894	1004	NADIR SAMPLE 30	15894
428	CH 3	16382	1006	CH 3	16379
430	CH 4	15558	1008	CH 4	15556
432	CH 5	17109	1010	CH 5	17109
434	CH 6	15520	1012	CH 6	15522
436	CH 7	16541	1014	CH 7	16540
438	CH 8	16312	1016	CH 8	16315
440	CH 9	16494	1018	CH 9	16492
442	CH 10	17488	1020	CH 10	17491
444	CH 11	17632	1022	CH 11	17639
446	CH 12	17526	1024	CH 12	17514
448	CH 13	19224	1026	CH 13	19217
450	CH 14	16444	1028	CH 14	16441
452	CH 15	3975	1030	CH 15	OE
454	REFLECTOR 1 POSITION 14	3621	1032	REFLECTOR 1 COLD CAL POS	OE
456	REFLECTOR 2 POSITION 14	3975	1034	REFLECTOR 2 COLD CAL POS	OE
458	REFL 1 POS 14 2ND LOOK	3621	1036	REFL 1 COLD CAL 2ND LOOK	OE
460	REFL 2 POS 14 2ND LOOK	15894	1038	REFL 2 COLD CAL 2ND LOOK	OE
462	NADIR SAMPLE 14	16380	1040	COLD CAL DATA 1	0
464	CH 3	15559	1042	CH 3	0
466	CH 4	17106	1044	CH 4	0
468	CH 5	15519	1046	CH 5	0
470	CH 6	16540	1048	CH 6	0
472	CH 7	16315	1050	CH 7	0
474	CH 8	16488	1052	CH 8	0
476	CH 9	17485	1054	CH 9	0
478	CH 10	17638	1056	CH 10	0
480	CH 11	17517	1058	CH 11	0
482	CH 12	19233	1060	CH 12	0
484	CH 13	16444	1062	CH 13	0
486	CH 14	3975	1064	CH 14	0
488	CH 15	3621	1066	CH 15	0
490	REFLECTOR 1 POSITION 15	3975	1068	REFLECTOR 1 COLD CAL DATA 2	0
492	REFLECTOR 2 POSITION 15	3621	1070	REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK	3975		REFL 1 COLD CAL DATA 2	0
	REFL 2 POS 15 2ND LOOK	3621		REFL 2 COLD CAL DATA 2	0



ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	NADIR SAMPLE 15	CH 3	15891	1072	CH 7
496		CH 4	16380	1074	CH 8
498		CH 5	15559	1076	CH 9
500		CH 6	17103	1078	CH 10
502		CH 7	15520	1080	CH 11
504		CH 8	16545	1082	CH 12
506		CH 9	16314	1084	CH 13
508		CH 10	16488	1086	CH 14
510		CH 11	17486	1088	CH 15
512		CH 12	17632	1182	REFLECTOR 1 WARM CAL POS
514		CH 13	17511	1184	REFLECTOR 2 WARM CAL POS
516		CH 14	19223	1186	REFL 1 WARM CAL 2ND LOOK
518		CH 15	16443	1188	REFL 2 WARM CAL 2ND LOOK
520	REFLECTOR 1 POSITION 16	CH 16	3975	1190	WARM CAL DATA 1
522	REFLECTOR 2 POSITION 16	CH 17	3621	1192	
524	REFL 1 POS 16 2ND LOOK	CH 18	3975	1194	
526	REFL 2 POS 16 2ND LOOK	CH 19	3621	1196	
528	NADIR SAMPLE 16	CH 20	15891	1198	
530		CH 21	16380	1200	
532		CH 22	15558	1202	
534		CH 23	17106	1204	
536		CH 24	15524	1206	
538		CH 25	16541	1208	
540		CH 26	16311	1210	
542		CH 27	16488	1212	
544		CH 28	17486	1214	
546		CH 29	17634	1216	WARM CAL DATA 2
548		CH 30	17511	1218	
550		CH 31	19197	1220	
552		CH 32	16445	1222	
554	REFLECTOR 1 POSITION 17	CH 33	3975	1224	
556	REFLECTOR 2 POSITION 17	CH 34	3621	1226	
558	REFL 1 POS 17 2ND LOOK	CH 35	3975	1228	
560	REFL 2 POS 17 2ND LOOK	CH 36	3621	1230	
562	NADIR SAMPLE 17	CH 37	15888	1232	
564		CH 38	16379	1234	
566		CH 39	15558	1236	
568		CH 40	17109	1238	
570		CH 41	15520	1240	

SCIENCE DATA  
NADIR MODE

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	18521	23.91
1092	SCAN MOTOR A1-2	19970	25.97
1094	FEED HORN A1-1	20994	28.97
1096	FEED HORN A1-2	22199	31.33
1098	RF MUX A1-1	23223	33.11
1100	RF MUX A1-2	24592	35.91
1102	LOCAL OSCILLATOR CHANNEL 3	25546	37.97
1104	LOCAL OSCILLATOR CHANNEL 4	25958	38.09
1106	LOCAL OSCILLATOR CHANNEL 5	24757	36.40
1108	LOCAL OSCILLATOR CHANNEL 6	23430	32.88
1110	LOCAL OSCILLATOR CHANNEL 7	23953	34.63
1112	LOCAL OSCILLATOR CHANNEL 8	25332	37.39
1114	LOCAL OSCILLATOR CHANNEL 15	25028	36.32
1116	PLLO #2	23220	33.13
1118	PLLO #1	26137	38.84
1120	1553 INTERFACE	19192	38.36
1122	MIXER/IF AMPLIFIER CHANNEL 3	24909	36.44
1124	MIXER/IF AMPLIFIER CHANNEL 4	25068	36.28
1126	MIXER/IF AMPLIFIER CHANNEL 5	24652	35.87
1128	MIXER/IF AMPLIFIER CHANNEL 6	23529	33.69
1130	MIXER/IF AMPLIFIER CHANNEL 7	23563	34.32
1132	MIXER/IF AMPLIFIER CHANNEL 8	24994	36.48
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	22999	32.90
1136	MIXER/IF AMPLIFIER CHANNEL 15	24786	36.38
1138	IF AMPLIFIER CHANNEL 11 THRU 14	24536	35.70
1140	IF AMPLIFIER CHANNEL 9	24723	35.96
1142	IF AMPLIFIER CHANNEL 10	24566	35.92
1144	IF AMPLIFIER CHANNEL 11	23725	33.43
1146	DC/DC CONVERTER	25984	37.83
1148	IF AMPLIFIER CHANNEL 13	23306	32.73
1150	IF AMPLIFIER CHANNEL 14	23666	33.87
1152	IF AMPLIFIER CHANNEL 12	23476	33.30
1154	RF SHELF A1-1	23960	34.51
1156	RF SHELF A1-2	24657	35.25
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	21561	29.91
1160	A1-1 WARM LOAD 1	24217	25.42
1162	A1-1 WARM LOAD 2	24722	25.54
1164	A1-1 WARM LOAD 3	24216	25.56
1166	A1-1 WARM LOAD 4	24295	25.53
1168	A1-1 WARM LOAD CENTER	24495	25.56
1170	A1-2 WARM LOAD 1	25668	27.75
1172	A1-2 WARM LOAD 2	25723	27.77
1174	A1-2 WARM LOAD 3	25739	27.78
1176	A1-2 WARM LOAD 4	25728	27.66
1178	A1-2 WARM LOAD CENTER	25738	27.76
1180	TEMP SENSOR REFERENCE VOLTAGE	25272	

## DESCRIPTION

## STATUS

ANTENNA IN FULL SCAN MODE	NO
ANTENNA IN WARM CAL MODE	NO
ANTENNA IN COLD CAL MODE	YES
ANTENNA IN NADIR MODE	NO
COLD CAL. POSITION LSB	ZERO
COLD CAL. POSITION MSB	ONE
PLO REDUNDANCY	PLLO # 1
SCANNER A1-1 POWER	ON
SCANNER A1-2 POWER	ON
PLLO #1 LOCK	YES
PLLO #2 LOCK	OFF
ADC LATCHUP FLAG	ONE

## ENGINEERING DATA

## DESCRIPTION

## DEG C

A1-1 SCANNER MOTOR TEMPERATURE	23.3
A1-1 RF SHELF TEMPERATURE #1	31.0
A1-1 WARM LOAD TEMPERATURE	24.5
A1-2 SCANNER MOTOR TEMPERATURE	26.1
A1-2 RF SHELF TEMPERATURE #1	35.5
A1-2 WARM LOAD TEMPERATURE	26.9
A1-1 RF SHELF TEMPERATURE #2	30.9
A1-2 RF SHELF TEMPERATURE #2	35.1

## VALUE

## MA/VOLTS

SIGNAL PROCESSOR	+5 VDC	22091	0.0
	+15 VDC	21836	0.0
	-15 VDC	21796	0.0
SCAN DRIVE	+5 VDC	22172	0.0
	+15 VDC	22229	0.0
	-15 VDC	21856	0.0
PLO	+15 VDC	22558	0.0
	-15 VDC	22080	0.0
RECEIVER	+8 VDC	21813	0.0
MIXER/ IF AMPLIFIER A1-1	+10 VDC	21416	0.0
A1-2	+10 VDC	21429	0.0
LO CHANNEL 6	+10 VDC	21394	0.0
7	+10 VDC	21439	0.0
SPARE		32767	0.0
LO CHANNEL 3	+10 VDC	21245	0.0
4	+10 VDC	21178	0.0
5	+10 VDC	21380	0.0
8	+10 VDC	21319	0.0
15	+15 VDC	22015	0.0
QUIET BUS CURRENT		16412	0.0
A1-1 NOISY POWER BUS CURRENT		4890	0.0
A1-2 NOISY POWER BUS CURRENT		4636	0.0

## PRT TEMPERATURES

## VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

## FIXED TARGET

## BASEPLATE

## THERMOCOUPLE TEMPERATURES

## FIXED TARGET SHROUD

## VARIABLE TARGET SHROUD

## FIXED TARGET N2

## VARIABLE TARGET N2

## HEATER N2

## FIXED TARGET FLOW METER

## VARIABLE TARGET FLOW METER

## BASEPLATE HEATER N2

## BASEPLATE N2

## BASEPLATE FLOW METER

## ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00

EOS A1-03 EL EXE:40 COLD CAL MODE		P1 13-NOV-98 17:39:40		SCAN NUMBER	1013
[ 5 ]	SCIENCE DATA ELEMENT	0000			
[ 6 ]	CONTROL/STATUS ELEMENT	00			
[ 7 ]	ENGINEERING ELEMENT	00			
COMMANDS					
[ 9 ]	SCANNER A1-1 POWER =	ON	PLLO POWER =	PLLO#1 [ 15 ]	
[ 10 ]	SCANNER A1-2 POWER =	ON	COLD CAL POSITION 1 =	NO [ 16 ]	
[ 11 ]	ANTENNA FULL SCAN MODE =	NO	2 =	NO [ 17 ]	
[ 12 ]	WARM CAL =	NO	3 =	NO [ 18 ]	
[ 13 ]	COLD CAL =	YES	COLD CAL POSITION 4 =	YES [ 19 ]	
[ 14 ]	NADIR =	NO	RESET C&DH PROCESSOR	[ 20 ]	
			GSE MODE	[ 21 ]	
ENGR OK	POWER	ON	CHECKSUM IN D2C5 CALC D2C5 SA28	2217 SA29 4418	
	SCREEN ONLY [ 2 ]		PRINT [ 3 ] FULL	[ 1 ] RETURN	
SELECT BUTTON 3					

Parag. 3.3.5.3.3 step 26 Cold Cal 4  
 support TDS II of AE-26156/9  
~~sup~~ final CPT- EOS/AMSV-A1 SIN 202  
 S/0560863 Oper. 0586

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	NADIR SAMPLE 17	16540
2		00000011	574		16310
3	PACKET LENGTH	00000010	576		16487
4		10111111	578		17481
5	UNIT SERIAL NUMBER	00000011	580		17631
6		00000000	582		17518
7	INSTRUMENT MODE/STATUS	10011010	584		19219
8		01101000	586		16433
10	REFLECTOR 1 POSITION 1	3827	588	REFLECTOR 1 POSITION 18	3827
12	REFLECTOR 2 POSITION 1	3476	590	REFLECTOR 2 POSITION 18	3476
14	REFL 1 POS 1 2ND LOOK	3827	592	REFL 1 POS 18 2ND LOOK	3827
16	REFL 2 POS 1 2ND LOOK	3476	594	REFL 2 POS 18 2ND LOOK	3476
18	NADIR SAMPLE 1	15888	596	NADIR SAMPLE 18	15883
20		16373	598		16371
22		15553	600		15548
24		17098	602		17098
26		15513	604		15514
28		16536	606		16538
30		16308	608		16312
32		16484	610		16480
34		17477	612		17478
36		17632	614		17637
38		17505	616		17509
40		19183	618		19194
42		16434	620		16434
44	REFLECTOR 1 POSITION 2	3827	622	REFLECTOR 1 POSITION 19	3827
46	REFLECTOR 2 POSITION 2	3476	624	REFLECTOR 2 POSITION 19	3476
48	REFL 1 POS 2 2ND LOOK	3827	626	REFL 1 POS 19 2ND LOOK	3827
50	REFL 2 POS 2 2ND LOOK	3476	628	REFL 2 POS 19 2ND LOOK	3476
52	NADIR SAMPLE 2	15889	630	NADIR SAMPLE 19	15879
54		16373	632		16375
56		15550	634		15549
58		17098	636		17100
60		15516	638		15515
62		16539	640		16538
64		16309	642		16314
66		16485	644		16479
68		17482	646		17475
70		17625	648		17625
72		17502	650		17493
74		19199	652		19190
76		16435	654		16433
78	REFLECTOR 1 POSITION 3	3827	656	REFLECTOR 1 POSITION 20	3827
80	REFLECTOR 2 POSITION 3	3476	658	REFLECTOR 2 POSITION 20	3476
82	REFL 1 POS 3 2ND LOOK	3827	660	REFL 1 POS 20 2ND LOOK	3827
84	REFL 2 POS 3 2ND LOOK	3476	662	REFL 2 POS 20 2ND LOOK	3476
86	NADIR SAMPLE 3	15886	664	NADIR SAMPLE 20	15882
88		16371	666		16370
90		15555	668		15551
92		17098	670		17096

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15515	672	REFLECTOR 1 POSITION 21	3827
96	CH 8	16538	674	REFLECTOR 2 POSITION 21	3476
98	CH 9	16313	676	REFL 1 POS 21 2ND LOOK	3827
100	CH 10	16479	678	REFL 2 POS 21 2ND LOOK	3476
102	CH 11	17483	680	NADIR SAMPLE 21	15886
104	CH 12	17624	682	CH 3	16375
106	CH 13	17510	684	CH 4	16375
108	CH 14	19167	686	CH 5	15552
110	CH 15	16433	688	CH 6	17098
112	REFLECTOR 1 POSITION 4	3827	690	CH 7	15513
114	REFLECTOR 2 POSITION 4	3476	692	CH 8	16537
116	REFL 1 POS 4 2ND LOOK	3827	694	CH 9	16308
118	REFL 2 POS 4 2ND LOOK	3476	696	CH 10	16480
120	NADIR SAMPLE 4	15882	698	CH 11	17477
122	CH 3	16372	700	CH 12	17631
124	CH 4	15552	702	CH 13	17506
126	CH 5	17098	704	CH 14	19197
128	CH 6	15515	706	CH 15	16433
130	CH 7	15515	708	REFLECTOR 1 POSITION 22	3827
132	CH 8	16536	710	REFLECTOR 2 POSITION 22	3476
134	CH 9	16308	712	REFL 1 POS 22 2ND LOOK	3827
136	CH 10	16481	714	REFL 2 POS 22 2ND LOOK	3476
138	CH 11	17476	716	NADIR SAMPLE 22	15885
140	CH 12	17624	718	CH 3	16378
142	CH 13	17507	720	CH 4	15551
144	CH 14	19182	722	CH 5	17101
146	CH 15	16434	724	CH 6	15514
148	REFLECTOR 1 POSITION 5	3827	726	CH 7	15514
150	REFLECTOR 2 POSITION 5	3476	728	CH 8	16534
152	REFL 1 POS 5 2ND LOOK	3827	730	CH 9	16312
154	REFL 2 POS 5 2ND LOOK	3476	732	CH 10	16481
156	NADIR SAMPLE 5	15881	734	CH 11	17476
158	CH 3	16375	736	CH 12	17629
160	CH 4	15555	738	CH 13	17502
162	CH 5	17097	740	CH 14	19207
164	CH 6	15513	742	CH 15	16433
166	CH 7	16542	744	REFLECTOR 1 POSITION 23	3827
168	CH 8	16308	746	REFLECTOR 2 POSITION 23	3476
170	CH 9	16485	748	REFL 1 POS 23 2ND LOOK	3827
172	CH 10	17478	750	REFL 2 POS 23 2ND LOOK	3476
174	CH 11	17629	752	NADIR SAMPLE 23	15879
176	CH 12	17508	754	CH 3	16375
178	CH 13	19187	756	CH 4	15554
180	CH 14	16435	758	CH 5	
182	REFLECTOR 1 POSITION 6	3827	760		
184	REFLECTOR 2 POSITION 6	3476	762		
186	REFL 1 POS 6 2ND LOOK	3827	764		
188	REFL 2 POS 6 2ND LOOK	3476	766		
190	NADIR SAMPLE 6	15882	768		
192	CH 3	16373	770		

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17097	772	CH 6	17097
196	CH 7	15511	774	CH 7	15513
198	CH 8	16539	776	CH 8	16536
200	CH 9	16309	778	CH 9	16311
202	CH 10	16479	780	CH 10	16483
204	CH 11	17475	782	CH 11	17481
206	CH 12	17624	784	CH 12	17624
208	CH 13	17504	786	CH 13	17513
210	CH 14	19207	788	CH 14	19225
212	CH 15	16434	790	CH 15	16432
214	REFLECTOR 1 POSITION 7	3827	792	REFLECTOR 1 POSITION 24	3827
216	REFLECTOR 2 POSITION 7	3476	794	REFLECTOR 2 POSITION 24	3476
218	REFL 1 POS 7 2ND LOOK	3827	796	REFL 1 POS 24 2ND LOOK	3827
220	REFL 2 POS 7 2ND LOOK	3476	798	REFL 2 POS 24 2ND LOOK	3476
222	NADIR SAMPLE 7	15884	800	NADIR SAMPLE 24	15882
224	CH 3	16374	802	CH 3	16370
226	CH 4	15553	804	CH 4	15549
228	CH 5	17092	806	CH 5	17098
230	CH 6	15513	808	CH 6	15517
232	CH 7	16540	810	CH 7	16536
234	CH 8	16309	812	CH 8	16307
236	CH 9	16477	814	CH 9	16482
238	CH 10	17481	816	CH 10	17473
240	CH 11	17636	818	CH 11	17627
242	CH 12	17502	820	CH 12	17492
244	CH 13	19214	822	CH 13	19192
246	CH 14	16435	824	CH 14	16433
248	CH 15	3827	826	CH 15	3827
250	REFLECTOR 1 POSITION 8	3476	828	REFLECTOR 1 POSITION 25	3476
252	REFLECTOR 2 POSITION 8	3827	830	REFLECTOR 2 POSITION 25	3827
254	REFL 1 POS 8 2ND LOOK	3476	832	REFL 1 POS 25 2ND LOOK	3476
256	REFL 2 POS 8 2ND LOOK	15885	834	REFL 2 POS 25 2ND LOOK	15881
258	NADIR SAMPLE 8	16371	836	NADIR SAMPLE 25	16372
260	CH 3	15552	838	CH 3	15555
262	CH 4	17097	840	CH 4	17092
264	CH 5	15512	842	CH 5	15513
266	CH 6	16536	844	CH 6	16539
268	CH 7	16312	846	CH 7	16309
270	CH 8	16485	848	CH 8	16481
272	CH 9	17476	850	CH 9	17477
274	CH 10	17626	852	CH 10	17624
276	CH 11	17493	854	CH 11	17499
278	CH 12	19192	856	CH 12	19206
280	CH 13	16433	858	CH 13	16434
282	CH 14	3827	860	CH 14	3827
284	CH 15	3476	862	CH 15	3476
286	REFLECTOR 1 POSITION 9	3827	864	REFLECTOR 1 POSITION 26	3827
288	REFLECTOR 2 POSITION 9	3476	866	REFLECTOR 2 POSITION 26	3476
290	REFL 1 POS 9 2ND LOOK	15892	868	REFL 1 POS 26 2ND LOOK	15880
292	REFL 2 POS 9 2ND LOOK	16374	870	REFL 2 POS 26 2ND LOOK	16374
	NADIR SAMPLE 9			NADIR SAMPLE 26	
	CH 3			CH 3	
	CH 4			CH 4	



ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15551	872	CH 5	15550
296	CH 6	17097	874	CH 6	17095
298	CH 7	15516	876	CH 7	15514
300	CH 8	16537	878	CH 8	16535
302	CH 9	16310	880	CH 9	16305
304	CH 10	16480	882	CH 10	16482
306	CH 11	17478	884	CH 11	17480
308	CH 12	17635	886	CH 12	17622
310	CH 13	17511	888	CH 13	17492
312	CH 14	19184	890	CH 14	19179
314	CH 15	16436	892	CH 15	16433
316	REFLECTOR 1 POSITION 10	3827	894	REFLECTOR 1 POSITION 27	3827
318	REFLECTOR 2 POSITION 10	3476	896	REFLECTOR 2 POSITION 27	3476
320	REFL 1 POS 10 2ND LOOK	3827	898	REFL 1 POS 27 2ND LOOK	3827
322	REFL 2 POS 10 2ND LOOK	3476	900	REFL 2 POS 27 2ND LOOK	3476
324	NADIR SAMPLE 10	15885	902	NADIR SAMPLE 27	15883
326	CH 4	16371	904	CH 4	16374
328	CH 5	15553	906	CH 5	15550
330	CH 6	17095	908	CH 6	17094
332	CH 7	15513	910	CH 7	15513
334	CH 8	16539	912	CH 8	16536
336	CH 9	16311	914	CH 9	16309
338	CH 10	16483	916	CH 10	16478
340	CH 11	17481	918	CH 11	17480
342	CH 12	17628	920	CH 12	17628
344	CH 13	17506	922	CH 13	17505
346	CH 14	19188	924	CH 14	19196
348	CH 15	16432	926	CH 15	16434
350	REFLECTOR 1 POSITION 11	3827	928	REFLECTOR 1 POSITION 28	3827
352	REFLECTOR 2 POSITION 11	3476	930	REFLECTOR 2 POSITION 28	3476
354	REFL 1 POS 11 2ND LOOK	3827	932	REFL 1 POS 28 2ND LOOK	3827
356	REFL 2 POS 11 2ND LOOK	3476	934	REFL 2 POS 28 2ND LOOK	3476
358	NADIR SAMPLE 11	15883	936	NADIR SAMPLE 28	15884
360	CH 4	16371	938	CH 4	16374
362	CH 5	15550	940	CH 5	15552
364	CH 6	17100	942	CH 6	17092
366	CH 7	15515	944	CH 7	15512
368	CH 8	16537	946	CH 8	16535
370	CH 9	16307	948	CH 9	16310
372	CH 10	16474	950	CH 10	16476
374	CH 11	17482	952	CH 11	17485
376	CH 12	17624	954	CH 12	17628
378	CH 13	17501	956	CH 13	17499
380	CH 14	19187	958	CH 14	19189
382	CH 15	16433	960	CH 15	16434
384	REFLECTOR 1 POSITION 12	3827	962	REFLECTOR 1 POSITION 29	3827
386	REFLECTOR 2 POSITION 12	3476	964	REFLECTOR 2 POSITION 29	3476
388	REFL 1 POS 12 2ND LOOK	3827	966	REFL 1 POS 29 2ND LOOK	3827
390	REFL 2 POS 12 2ND LOOK	3476	968	REFL 2 POS 29 2ND LOOK	3476
392	NADIR SAMPLE 12	15882	970	NADIR SAMPLE 29	15882

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16373	972	CH 4	16378
396	CH 5	15550	974	CH 5	15555
398	CH 6	17099	976	CH 6	17096
400	CH 7	15516	978	CH 7	15512
402	CH 8	16538	980	CH 8	16537
404	CH 9	16310	982	CH 9	16309
406	CH 10	16483	984	CH 10	16482
408	CH 11	17480	986	CH 11	17476
410	CH 12	17610	988	CH 12	17620
412	CH 13	17503	990	CH 13	17503
414	CH 14	19190	992	CH 14	19172
416	CH 15	16432	994	CH 15	16434
418	REFLECTOR 1 POSITION 13	3827	996	REFLECTOR 1 POSITION 30	3827
420	REFLECTOR 2 POSITION 13	3476	998	REFLECTOR 2 POSITION 30	3476
422	REFL 1 POS 13 2ND LOOK	3827	1000	REFL 1 POS 30 2ND LOOK	3827
424	REFL 2 POS 13 2ND LOOK	3476	1002	REFL 2 POS 30 2ND LOOK	3476
426	NADIR SAMPLE 13	15887	1004	NADIR SAMPLE 30	15884
428	CH 3	16372	1006	CH 3	16374
430	CH 4	15547	1008	CH 4	15551
432	CH 5	17094	1010	CH 5	17097
434	CH 6	15511	1012	CH 6	15518
436	CH 7	16535	1014	CH 7	16536
438	CH 8	16307	1016	CH 8	16310
440	CH 9	16480	1018	CH 9	16482
442	CH 10	17482	1020	CH 10	17479
444	CH 11	17629	1022	CH 11	17626
446	CH 12	17502	1024	CH 12	17495
448	CH 13	19193	1026	CH 13	19205
450	CH 14	16433	1028	CH 14	16432
452	CH 15	3827	1030	CH 15	OE
454	REFLECTOR 1 POSITION 14	3476	1032	REFLECTOR 1 COLD CAL POS	OE
456	REFLECTOR 2 POSITION 14	3827	1034	REFLECTOR 2 COLD CAL POS	OE
458	REFL 1 POS 14 2ND LOOK	3476	1036	REFL 1 COLD CAL 2ND LOOK	OE
460	REFL 2 POS 14 2ND LOOK	15882	1038	REFL 2 COLD CAL 2ND LOOK	OE
462	NADIR SAMPLE 14	16372	1040	COLD CAL DATA 1	0
464	CH 3	15554	1042	CH 3	0
466	CH 4	17096	1044	CH 4	0
468	CH 5	15514	1046	CH 5	0
470	CH 6	16536	1048	CH 6	0
472	CH 7	16309	1050	CH 7	0
474	CH 8	16476	1052	CH 8	0
476	CH 9	17476	1054	CH 9	0
478	CH 10	17634	1056	CH 10	0
480	CH 11	17499	1058	CH 11	0
482	CH 12	19188	1060	CH 12	0
484	CH 13	16433	1062	CH 13	0
486	CH 14	3827	1064	CH 14	0
488	CH 15	3476	1066	CH 15	0
490	REFLECTOR 1 POSITION 15	3827	1068	REFLECTOR 1 COLD CAL DATA 2	0
492	REFLECTOR 2 POSITION 15	3476	1070	REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK			REFL 1 COLD CAL 2ND LOOK	0
	REFL 2 POS 15 2ND LOOK			REFL 2 COLD CAL 2ND LOOK	0

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	NADIR SAMPLE 15	CH 3	1072		0
496		CH 4	16371	CH 7	0
498		CH 5	1074	CH 8	0
500		CH 6	15549	CH 9	0
502		CH 7	17095	CH 10	0
504		CH 8	15515	CH 11	0
506		CH 9	1080	CH 12	0
508		CH 10	16539	CH 13	0
510		CH 11	1082	CH 14	0
512		CH 12	16310	CH 15	0
514		CH 13	1084	REFLECTOR 1 WARM CAL POS	OE
516		CH 14	16488	REFLECTOR 2 WARM CAL POS	OE
518		CH 15	17475	REFL 1 WARM CAL 2ND LOOK	OE
520	REFLECTOR 1 POSITION 16	CH 16	1182	REFL 2 WARM CAL 2ND LOOK	OE
522	REFLECTOR 2 POSITION 16	CH 17	17500	WARM CAL DATA 1	0
524	REFL 1 POS 16 2ND LOOK	CH 18	1184		0
526	REFL 2 POS 16 2ND LOOK	CH 19	1186		0
528	NADIR SAMPLE 16	CH 20	19197		0
530		CH 21	16434		0
532		CH 22	3827		0
534		CH 23	3476		0
536		CH 24	3827		0
538		CH 25	15879		0
540		CH 26	16372		0
542		CH 27	1200		0
544		CH 28	15553		0
546		CH 29	17098		0
548		CH 30	15514		0
550		CH 31	16537		0
552		CH 32	1208		0
554	REFLECTOR 1 POSITION 17	CH 33	1210		0
556	REFLECTOR 2 POSITION 17	CH 34	16306		0
558	REFL 1 POS 17 2ND LOOK	CH 35	1212		0
560	REFL 2 POS 17 2ND LOOK	CH 36	17481		0
562	NADIR SAMPLE 17	CH 37	17627		0
564		CH 38	1216		0
566		CH 39	17502		0
568		CH 40	19182		0
570		CH 41	16433		0
		CH 42	3827		0
		CH 43	3476		0
		CH 44	3827		0
		CH 45	3476		0
		CH 46	15883		0
		CH 47	16373		0
		CH 48	15552		0
		CH 49	17095		0
		CH 50	15512		0
		CH 51	1240		0

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	18536	23.94
1092	SCAN MOTOR A1-2	19982	25.99
1094	FEED HORN A1-1	20986	28.95
1096	FEED HORN A1-2	22178	31.29
1098	RF MUX A1-1	23244	33.15
1100	RF MUX A1-2	24613	35.95
1102	LOCAL OSCILLATOR CHANNEL 3	25566	38.01
1104	LOCAL OSCILLATOR CHANNEL 4	25977	38.13
1106	LOCAL OSCILLATOR CHANNEL 5	24775	36.44
1108	LOCAL OSCILLATOR CHANNEL 6	23449	32.92
1110	LOCAL OSCILLATOR CHANNEL 7	23974	34.68
1112	LOCAL OSCILLATOR CHANNEL 8	25348	37.43
1114	LOCAL OSCILLATOR CHANNEL 15	25048	36.36
1116	PLLO #2	23240	33.17
1118	PLLO #1	26156	38.88
1120	1553 INTERFACE	19213	38.40
1122	MIXER/IF AMPLIFIER CHANNEL 3	24929	36.48
1124	MIXER/IF AMPLIFIER CHANNEL 4	25088	36.32
1126	MIXER/IF AMPLIFIER CHANNEL 5	24669	35.90
1128	MIXER/IF AMPLIFIER CHANNEL 6	23551	33.74
1130	MIXER/IF AMPLIFIER CHANNEL 7	23583	34.36
1132	MIXER/IF AMPLIFIER CHANNEL 8	25015	36.52
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	23019	32.94
1136	MIXER/IF AMPLIFIER CHANNEL 15	24805	36.41
1138	IF AMPLIFIER CHANNEL 11 THRU 14	24556	35.74
1140	IF AMPLIFIER CHANNEL 9	24743	36.00
1142	IF AMPLIFIER CHANNEL 10	24586	35.96
1144	IF AMPLIFIER CHANNEL 11	23747	33.47
1146	DC/DC CONVERTER	25994	37.85
1148	IF AMPLIFIER CHANNEL 13	23328	32.77
1150	IF AMPLIFIER CHANNEL 14	23687	33.91
1152	IF AMPLIFIER CHANNEL 12	23497	33.34
1154	RF SHELF A1-1	23980	34.55
1156	RF SHELF A1-2	24671	35.28
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	21583	29.95
1160	A1-1 WARM LOAD 1	24244	25.47
1162	A1-1 WARM LOAD 2	24746	25.59
1164	A1-1 WARM LOAD 3	24237	25.61
1166	A1-1 WARM LOAD 4	24312	25.57
1168	A1-1 WARM LOAD CENTER	24511	25.59
1170	A1-2 WARM LOAD 1	25687	27.79
1172	A1-2 WARM LOAD 2	25743	27.81
1174	A1-2 WARM LOAD 3	25751	27.80
1176	A1-2 WARM LOAD 4	25748	27.70
1178	A1-2 WARM LOAD CENTER	25757	27.80
1180	TEMP SENSOR REFERENCE VOLTAGE	25272	

DESCRIPTION	STATUS
ANTENNA IN FULL SCAN MODE	NO
ANTENNA IN WARM CAL MODE	NO
ANTENNA IN COLD CAL MODE	YES
ANTENNA IN NADIR MODE	NO
COLD CAL. POSITION LSB	ONE
COLD CAL. POSITION MSB	ONE
PLO REDUNDANCY	PLO # 1
SCANNER A1-1 POWER	ON
SCANNER A1-2 POWER	ON
PLLO #1 LOCK	YES
PLLO #2 LOCK	OFF
ADC LATCHUP FLAG	ONE

ENGINEERING DATA	
DESCRIPTION	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	23.3
A1-1 RF SHELF TEMPERATURE #1	31.0
A1-1 WARM LOAD TEMPERATURE	24.5
A1-2 SCANNER MOTOR TEMPERATURE	26.1
A1-2 RF SHELF TEMPERATURE #1	35.5
A1-2 WARM LOAD TEMPERATURE	26.9
A1-1 RF SHELF TEMPERATURE #2	30.9
A1-2 RF SHELF TEMPERATURE #2	35.1
DESCRIPTION	MA/VOLTS
SIGNAL PROCESSOR	22075
	21837
	21798
SCAN DRIVE	22169
	22176
	21850
PLO	22556
	22084
RECEIVER	21813
MIXER/IF AMPLIFIER A1-1	21416
A1-2	21430
LO CHANNEL 6	21393
7	21430
SPARE	32767
LO CHANNEL 3	21248
4	21189
5	21379
8	21313
15	22014
QUIET BUS CURRENT	16311
A1-1 NOISY POWER BUS CURRENT	67
A1-2 NOISY POWER BUS CURRENT	44

## PRT TEMPERATURES

## VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

## FIXED TARGET

## BASEPLATE

## THERMOCOUPLE TEMPERATURES

## FIXED TARGET SHROUD

## VARIABLE TARGET SHROUD

## FIXED TARGET N2

## VARIABLE TARGET N2

## HEATER N2

## FIXED TARGET FLOW METER

## VARIABLE TARGET FLOW METER

## BASEPLATE HEATER N2

## BASEPLATE N2

## BASEPLATE FLOW METER

## ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00

EOS A1-03 ELI.EXE:40 COLD CAL MODE  
 [ 5 ] SCIENCE DATA ELEMENT 0000  
 [ 6 ] CONTROL/STATUS ELEMENT 00  
 [ 7 ] ENGINEERING ELEMENT 00

COMMANDS  
 [ 9 ] SCANNER A1-1 POWER = ON COLD CAL POSITION 1 = NO [ 16 ]  
 [ 10 ] SCANNER A1-2 POWER = ON 2 = NO [ 17 ]  
 [ 11 ] ANTENNA FULL SCAN MODE = NO 3 = NO [ 18 ]  
 [ 12 ] WARM CAL = NO COLD CAL POSITION 4 = YES [ 19 ]  
 [ 13 ] COLD CAL = YES RESET C&DH PROCESSOR [ 20 ]  
 [ 14 ] NADIR = NO GSE MODE [ 21 ]  
 ENGR OK POWER ON CHECKSUM IN D1A1 CALC D1A1 SA28 2273 SA29 4531  
 SCREEN ONLY [ 2 ] PRINT [ 3 ] FULL [ 1 ] RETURN  
 SELECT BUTTON 3

*Parag. 3.3.5.3.3 Step 30 Cold Cal 4.  
 Support TDS 11 of AE-26156/9  
 final CPT- EOS/ANSU-A1 S/N 202  
 S/O 560863 oper. 0580*

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	NADIR SAMPLE	17
2		00000011	574		CH 8
3	PACKET LENGTH	00000010	576		CH 9
4		10111111	578		CH 10
5	UNIT SERIAL NUMBER	00000011	580		CH 11
6		00000000	582		CH 12
7	INSTRUMENT MODE/STATUS	10011010	584		CH 13
8		01101000	586		CH 14
10	REFLECTOR 1 POSITION	3825	588	REFLECTOR 1 POSITION	18
12	REFLECTOR 2 POSITION	3475	590	REFLECTOR 2 POSITION	18
14	REFL 1 POS 1 2ND LOOK	3825	592	REFL 1 POS 18 2ND LOOK	3476
16	REFL 2 POS 1 2ND LOOK	3475	594	REFL 2 POS 18 2ND LOOK	3825
18	NADIR SAMPLE	15885	596	NADIR SAMPLE	3475
20		16368	598		15887
22		15552	600		16371
24		17096	602		15552
26		15509	604		17096
28		16538	606		15514
30		16308	608		16535
32		16477	610		16306
34		17476	612		16477
36		17621	614		17476
38		17504	616		17627
40		19189	618		17501
42		16433	620		19216
44	REFLECTOR 1 POSITION	3825	622	REFLECTOR 1 POSITION	19
46	REFLECTOR 2 POSITION	3475	624	REFLECTOR 2 POSITION	19
48	REFL 1 POS 2 2ND LOOK	3825	626	REFL 1 POS 19 2ND LOOK	3476
50	REFL 2 POS 2 2ND LOOK	3475	628	REFL 2 POS 19 2ND LOOK	3825
52	NADIR SAMPLE	15889	630	NADIR SAMPLE	3475
54		16370	632		15882
56		15555	634		16374
58		17099	636		15555
60		15514	638		17095
62		16539	640		15515
64		16308	642		16530
66		16478	644		16307
68		17482	646		16481
70		17629	648		17485
72		17499	650		17626
74		19189	652		17493
76		16432	654		19193
78	REFLECTOR 1 POSITION	3825	656	REFLECTOR 1 POSITION	20
80	REFLECTOR 2 POSITION	3475	658	REFLECTOR 2 POSITION	20
82	REFL 1 POS 3 2ND LOOK	3825	660	REFL 1 POS 20 2ND LOOK	3475
84	REFL 2 POS 3 2ND LOOK	3476	662	REFL 2 POS 20 2ND LOOK	3825
86	NADIR SAMPLE	15888	664	NADIR SAMPLE	3475
88		16374	666		15885
90		15560	668		16373
92		17093	670		15558
					17093



ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15513	672	CH 7	15512
96	CH 8	16536	674	CH 8	16538
98	CH 9	16306	676	CH 9	16304
100	CH 10	16481	678	CH 10	16475
102	CH 11	17477	680	CH 11	17478
104	CH 12	17627	682	CH 12	17627
106	CH 13	17497	684	CH 13	17508
108	CH 14	19174	686	CH 14	19193
110	CH 15	16433	688	CH 15	16432
112	REFLECTOR 1 POSITION 4	3825	690	REFLECTOR 1 POSITION 21	3825
114	REFLECTOR 2 POSITION 4	3475	692	REFLECTOR 2 POSITION 21	3475
116	REFL 1 POS 4 2ND LOOK	3825	694	REFL 1 POS 21 2ND LOOK	3825
118	REFL 2 POS 4 2ND LOOK	3475	696	REFL 2 POS 21 2ND LOOK	3476
120	NADIR SAMPLE 4	15885	698	NADIR SAMPLE 21	15883
122	CH 3	16372	700	CH 3	16373
124	CH 4	15553	702	CH 4	15556
126	CH 5	17098	704	CH 5	17095
128	CH 6	15512	706	CH 6	15514
130	CH 7	16537	708	CH 7	16536
132	CH 8	16309	710	CH 8	16309
134	CH 9	16484	712	CH 9	16484
136	CH 10	17471	714	CH 10	17469
138	CH 11	17629	716	CH 11	17631
140	CH 12	17504	718	CH 12	17502
142	CH 13	19179	720	CH 13	19206
144	CH 14	16433	722	CH 14	16431
146	CH 15	3825	724	CH 15	3825
148	REFLECTOR 1 POSITION 5	3476	726	REFLECTOR 1 POSITION 22	3475
150	REFLECTOR 2 POSITION 5	3825	728	REFLECTOR 2 POSITION 22	3825
152	REFL 1 POS 5 2ND LOOK	3475	730	REFL 1 POS 22 2ND LOOK	3475
154	REFL 2 POS 5 2ND LOOK	15887	732	REFL 2 POS 22 2ND LOOK	15890
156	NADIR SAMPLE 5	16371	734	NADIR SAMPLE 22	16370
158	CH 3	15554	736	CH 3	15559
160	CH 4	17095	738	CH 4	17095
162	CH 5	15514	740	CH 5	15519
164	CH 6	16539	742	CH 6	16538
166	CH 7	16309	744	CH 7	16312
168	CH 8	16476	746	CH 8	16477
170	CH 9	17472	748	CH 9	17481
172	CH 10	17634	750	CH 10	17628
174	CH 11	17496	752	CH 11	17508
176	CH 12	19204	754	CH 12	19170
178	CH 13	16433	756	CH 13	16434
180	CH 14	3825	758	CH 14	3825
182	CH 15	3475	760	CH 15	3476
184	REFLECTOR 1 POSITION 6	3825	762	REFLECTOR 1 POSITION 23	3825
186	REFLECTOR 2 POSITION 6	3476	764	REFLECTOR 2 POSITION 23	3475
188	REFL 1 POS 6 2ND LOOK	15881	766	REFL 1 POS 23 2ND LOOK	15887
190	REFL 2 POS 6 2ND LOOK	16369	768	REFL 2 POS 23 2ND LOOK	16372
192	NADIR SAMPLE 6	15555	770	NADIR SAMPLE 23	15555

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17094	772	REFLECTOR 1 POSITION 24	17095
196	CH 7	15511	774	REFLECTOR 2 POSITION 24	15513
198	CH 8	16538	776	REFL 1 POS 24 2ND LOOK	16538
200	CH 9	16309	778	REFL 2 POS 24 2ND LOOK	16310
202	CH 10	16481	780	NADIR SAMPLE 24	16477
204	CH 11	17469	782		17476
206	CH 12	17618	784		17622
208	CH 13	17492	786		17511
210	CH 14	19195	788		19214
212	CH 15	16433	790		16433
214	REFLECTOR 1 POSITION 7	3825	792		3825
216	REFLECTOR 2 POSITION 7	3475	794		3475
218	REFL 1 POS 7 2ND LOOK	3825	796		3825
220	REFL 2 POS 7 2ND LOOK	3476	798		3475
222	NADIR SAMPLE 7	15886	800		15883
224	CH 3	16369	802		16373
226	CH 4	15557	804		15558
228	CH 5	17093	806		17097
230	CH 6	15516	808		15515
232	CH 7	16536	810		16538
234	CH 8	16308	812		16306
236	CH 9	16481	814		16476
238	CH 10	17475	816		17472
240	CH 11	17618	818		17637
242	CH 12	17502	820		17500
244	CH 13	19192	822		19184
246	CH 14	16435	824		16434
248	CH 15	3825	826		3825
250	REFLECTOR 1 POSITION 8	3475	828		3475
252	REFLECTOR 2 POSITION 8	3825	830		3825
254	REFL 1 POS 8 2ND LOOK	3476	832		3476
256	REFL 2 POS 8 2ND LOOK	15884	834		15888
258	NADIR SAMPLE 8	16371	836		16372
260	CH 3	15553	838		15556
262	CH 4	17092	840		17097
264	CH 5	15510	842		15515
266	CH 6	16535	844		16537
268	CH 7	16305	846		16307
270	CH 8	16476	848		16481
272	CH 9	17479	850		17480
274	CH 10	17625	852		17626
276	CH 11	17503	854		17507
278	CH 12	19188	856		19195
280	CH 13	16425	858		16432
282	CH 14	3825	860		3825
284	CH 15	3475	862		3475
286	REFLECTOR 1 POSITION 9	3825	864		3825
288	REFLECTOR 2 POSITION 9	3476	866		3475
290	REFL 1 POS 9 2ND LOOK	15881	868		15882
292	REFL 2 POS 9 2ND LOOK	16374	870		16374
	NADIR SAMPLE 9				
	CH 3				
	CH 4				
	CH 5				
	CH 6				
	CH 7				
	CH 8				
	CH 9				
	CH 10				
	CH 11				
	CH 12				
	CH 13				
	CH 14				
	CH 15				
	REFLECTOR 1 POSITION 26				
	REFLECTOR 2 POSITION 26				
	REFL 1 POS 26 2ND LOOK				
	REFL 2 POS 26 2ND LOOK				
	NADIR SAMPLE 26				
	CH 3				
	CH 4				

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15554	872	CH 5	15557
296	CH 6	17096	874	CH 6	17096
298	CH 7	15512	876	CH 7	15511
300	CH 8	16538	878	CH 8	16537
302	CH 9	16308	880	CH 9	16309
304	CH 10	16482	882	CH 10	16478
306	CH 11	17468	884	CH 11	17473
308	CH 12	17630	886	CH 12	17625
310	CH 13	17489	888	CH 13	17492
312	CH 14	19209	890	CH 14	19200
314	CH 15	16432	892	CH 15	16432
316	REFLECTOR 1 POSITION 10	3825	894	REFLECTOR 1 POSITION 27	3825
318	REFLECTOR 2 POSITION 10	3475	896	REFLECTOR 2 POSITION 27	3476
320	REFL 1 POS 10 2ND LOOK	3825	898	REFL 1 POS 27 2ND LOOK	3825
322	REFL 2 POS 10 2ND LOOK	3475	900	REFL 2 POS 27 2ND LOOK	3475
324	NADIR SAMPLE 10	15885	902	NADIR SAMPLE 27	15885
326	CH 4	16371	904	CH 4	16375
328	CH 5	15555	906	CH 5	15552
330	CH 6	17093	908	CH 6	17099
332	CH 7	15511	910	CH 7	15514
334	CH 8	16535	912	CH 8	16539
336	CH 9	16307	914	CH 9	16309
338	CH 10	16477	916	CH 10	16481
340	CH 11	17478	918	CH 11	17475
342	CH 12	17623	920	CH 12	17626
344	CH 13	17499	922	CH 13	17488
346	CH 14	19184	924	CH 14	19174
348	CH 15	16433	926	CH 15	16433
350	REFLECTOR 1 POSITION 11	3825	928	REFLECTOR 1 POSITION 28	3825
352	REFLECTOR 2 POSITION 11	3475	930	REFLECTOR 2 POSITION 28	3476
354	REFL 1 POS 11 2ND LOOK	3825	932	REFL 1 POS 28 2ND LOOK	3825
356	REFL 2 POS 11 2ND LOOK	3475	934	REFL 2 POS 28 2ND LOOK	3476
358	NADIR SAMPLE 11	15883	936	NADIR SAMPLE 28	15890
360	CH 4	16373	938	CH 4	16372
362	CH 5	15555	940	CH 5	15553
364	CH 6	17095	942	CH 6	17096
366	CH 7	15512	944	CH 7	15512
368	CH 8	16537	946	CH 8	16538
370	CH 9	16308	948	CH 9	16310
372	CH 10	16480	950	CH 10	16481
374	CH 11	17479	952	CH 11	17473
376	CH 12	17625	954	CH 12	17627
378	CH 13	17506	956	CH 13	17508
380	CH 14	19188	958	CH 14	19189
382	CH 15	16431	960	CH 15	16433
384	REFLECTOR 1 POSITION 12	3825	962	REFLECTOR 1 POSITION 29	3825
386	REFLECTOR 2 POSITION 12	3475	964	REFLECTOR 2 POSITION 29	3475
388	REFL 1 POS 12 2ND LOOK	3825	966	REFL 1 POS 29 2ND LOOK	3825
390	REFL 2 POS 12 2ND LOOK	3476	968	REFL 2 POS 29 2ND LOOK	3476
392	NADIR SAMPLE 12	15884	970	NADIR SAMPLE 29	15885

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16371	972	CH 4	16374
396	CH 5	15554	974	CH 5	15556
398	CH 6	17098	976	CH 6	17095
400	CH 7	15511	978	CH 7	15514
402	CH 8	16536	980	CH 8	16539
404	CH 9	16305	982	CH 9	16308
406	CH 10	16479	984	CH 10	16478
408	CH 11	17474	986	CH 11	17478
410	CH 12	17639	988	CH 12	17620
412	CH 13	17498	990	CH 13	17501
414	CH 14	19188	992	CH 14	19173
416	CH 15	16433	994	CH 15	16433
418	REFLECTOR 1 POSITION 13	3825	996	REFLECTOR 1 POSITION 30	3825
420	REFLECTOR 2 POSITION 13	3476	998	REFLECTOR 2 POSITION 30	3476
422	REFL 1 POS 13 2ND LOOK	3825	1000	REFL 1 POS 30 2ND LOOK	3825
424	REFL 2 POS 13 2ND LOOK	3475	1002	REFL 2 POS 30 2ND LOOK	3475
426	NADIR SAMPLE 13	15878	1004	NADIR SAMPLE 30	15888
428	CH 3	16368	1006	CH 3	16374
430	CH 4	15554	1008	CH 4	15556
432	CH 5	17095	1010	CH 5	17093
434	CH 6	15513	1012	CH 6	15516
436	CH 7	16535	1014	CH 7	16536
438	CH 8	16308	1016	CH 8	16309
440	CH 9	16479	1018	CH 9	16482
442	CH 10	17473	1020	CH 10	17480
444	CH 11	17629	1022	CH 11	17626
446	CH 12	17498	1024	CH 12	17504
448	CH 13	19189	1026	CH 13	19189
450	CH 14	16431	1028	CH 14	16432
452	CH 15	3825	1030	CH 15	OE
454	REFLECTOR 1 POSITION 14	3475	1032	REFLECTOR 1 COLD CAL POS	OE
456	REFLECTOR 2 POSITION 14	3825	1034	REFLECTOR 2 COLD CAL POS	OE
458	REFL 1 POS 14 2ND LOOK	3825	1036	REFL 1 COLD CAL 2ND LOOK	OE
460	REFL 2 POS 14 2ND LOOK	3475	1038	REFL 2 COLD CAL 2ND LOOK	OE
462	NADIR SAMPLE 14	15885	1040	COLD CAL DATA 1	0
464	CH 3	16373	1042	CH 3	0
466	CH 4	15552	1044	CH 4	0
468	CH 5	17093	1046	CH 5	0
470	CH 6	15513	1048	CH 6	0
472	CH 7	16536	1050	CH 7	0
474	CH 8	16310	1052	CH 8	0
476	CH 9	16476	1054	CH 9	0
478	CH 10	17474	1056	CH 10	0
480	CH 11	17622	1058	CH 11	0
482	CH 12	17496	1060	CH 12	0
484	CH 13	19191	1062	CH 13	0
486	CH 14	16432	1064	CH 14	0
488	CH 15	3825	1066	CH 15	0
490	REFLECTOR 1 POSITION 15	3475	1068	REFLECTOR 1 COLD CAL DATA 2	0
492	REFLECTOR 2 POSITION 15	3825	1070	REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK	3475		REFL 1 COLD CAL DATA 2	0
	REFL 2 POS 15 2ND LOOK	3475		REFL 2 COLD CAL DATA 2	0

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	NADIR SAMPLE 15	CH 3	1072		0
496		CH 4	1074	CH 7	0
498		CH 5	1076	CH 8	0
500		CH 6	1078	CH 9	0
502		CH 7	1080	CH 10	0
504		CH 8	1082	CH 11	0
506		CH 9	1084	CH 12	0
508		CH 10	1086	CH 13	0
510		CH 11	1088	CH 14	0
512		CH 12	1182	CH 15	0
514		CH 13	1184	REFLECTOR 1 WARM CAL POS	OE
516		CH 14	1186	REFLECTOR 2 WARM CAL POS	OE
518		CH 15	1188	REFL 1 WARM CAL 2ND LOOK	OE
520	REFLECTOR 1 POSITION 16	CH 16	1190	REFL 2 WARM CAL 2ND LOOK	OE
522	REFLECTOR 2 POSITION 16	CH 17	1192	WARM CAL DATA 1	0
524	REFL 1 POS 16 2ND LOOK	CH 18	1194		0
526	REFL 2 POS 16 2ND LOOK	CH 19	1196		0
528	NADIR SAMPLE 16	CH 20	1198		0
530		CH 21	1200		0
532		CH 22	1202		0
534		CH 23	1204		0
536		CH 24	1206		0
538		CH 25	1208		0
540		CH 26	1210		0
542		CH 27	1212		0
544		CH 28	1214		0
546		CH 29	1216		0
548		CH 30	1218		0
550		CH 31	1220		0
552		CH 32	1222		0
554	REFLECTOR 1 POSITION 17	CH 33	1224		0
556	REFLECTOR 2 POSITION 17	CH 34	1226		0
558	REFL 1 POS 17 2ND LOOK	CH 35	1228		0
560	REFL 2 POS 17 2ND LOOK	CH 36	1230		0
562	NADIR SAMPLE 17	CH 37	1232		0
564		CH 38	1234		0
566		CH 39	1236		0
568		CH 40	1238		0
570		CH 41	1240		0

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE	DEG C
1090	SCAN MOTOR A1-1	18544	23.95	
1092	SCAN MOTOR A1-2	19977	25.98	
1094	FEED HORN A1-1	21010	29.00	
1096	FEED HORN A1-2	22207	31.35	
1098	RF MUX A1-1	23252	33.17	
1100	RF MUX A1-2	24617	35.96	
1102	LOCAL OSCILLATOR CHANNEL 3	25574	38.02	
1104	LOCAL OSCILLATOR CHANNEL 4	25984	38.14	
1106	LOCAL OSCILLATOR CHANNEL 5	24776	36.44	
1108	LOCAL OSCILLATOR CHANNEL 6	23461	32.94	
1110	LOCAL OSCILLATOR CHANNEL 7	23981	34.69	
1112	LOCAL OSCILLATOR CHANNEL 8	25351	37.43	
1114	LOCAL OSCILLATOR CHANNEL 15	25053	36.37	
1116	PILO #2	23245	33.18	
1118	PILO #1	26157	38.88	
1120	1553 INTERFACE	19222	38.42	
1122	MIXER/IF AMPLIFIER CHANNEL 3	24934	36.49	
1124	MIXER/IF AMPLIFIER CHANNEL 4	25089	36.32	
1126	MIXER/IF AMPLIFIER CHANNEL 5	24668	35.90	
1128	MIXER/IF AMPLIFIER CHANNEL 6	23560	33.75	
1130	MIXER/IF AMPLIFIER CHANNEL 7	23592	34.37	
1132	MIXER/IF AMPLIFIER CHANNEL 8	25019	36.53	
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	23026	32.95	
1136	MIXER/IF AMPLIFIER CHANNEL 15	24815	36.43	
1138	IF AMPLIFIER CHANNEL 11 THRU 14	24561	35.75	
1140	IF AMPLIFIER CHANNEL 9	24746	36.00	
1142	IF AMPLIFIER CHANNEL 10	24592	35.98	
1144	IF AMPLIFIER CHANNEL 11	23755	33.49	
1146	DC/DC CONVERTER	25981	37.83	
1148	IF AMPLIFIER CHANNEL 13	23334	32.78	
1150	IF AMPLIFIER CHANNEL 14	23693	33.92	
1152	IF AMPLIFIER CHANNEL 12	23505	33.35	
1154	RF SHELF A1-1	23983	34.56	
1156	RF SHELF A1-2	24673	35.29	
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	21589	29.97	
1160	A1-1 WARM LOAD 1	24247	25.48	
1162	A1-1 WARM LOAD 2	24749	25.60	
1164	A1-1 WARM LOAD 3	24250	25.63	
1166	A1-1 WARM LOAD 4	24324	25.59	
1168	A1-1 WARM LOAD CENTER	24521	25.61	
1170	A1-2 WARM LOAD 1	25689	27.80	
1172	A1-2 WARM LOAD 2	25752	27.83	
1174	A1-2 WARM LOAD 3	25756	27.81	
1176	A1-2 WARM LOAD 4	25751	27.71	
1178	A1-2 WARM LOAD CENTER	25759	27.80	
1180	TEMP SENSOR REFERENCE VOLTAGE	25272		

DESCRIPTION	STATUS	
ANTENNA IN FULL SCAN MODE	NO	
ANTENNA IN WARM CAL MODE	NO	
ANTENNA IN COLD CAL MODE	YES	
ANTENNA IN NADIR MODE	NO	
COLD CAL. POSITION LSB	ONE	
COLD CAL. POSITION MSB	ONE	
PLO REDUNDANCY	PLO # 1	
SCANNER A1-1 POWER	ON	
SCANNER A1-2 POWER	ON	
PLO #1 LOCK	YES	
PLO #2 LOCK	OFF	
ADC LATCHUP FLAG	ONE	
ENGINEERING DATA		
DESCRIPTION		DEG C
A1-1 SCANNER MOTOR TEMPERATURE		23.3
A1-1 RF SHELF TEMPERATURE #1		31.0
A1-1 WARM LOAD TEMPERATURE		24.5
A1-2 SCANNER MOTOR TEMPERATURE		26.1
A1-2 RF SHELF TEMPERATURE #1		35.5
A1-2 WARM LOAD TEMPERATURE		26.9
A1-1 RF SHELF TEMPERATURE #2		30.9
A1-2 RF SHELF TEMPERATURE #2		35.1
DESCRIPTION	VALUE	MA/VOLTS
SIGNAL PROCESSOR	22084	0.0
	21836	0.0
	21797	0.0
SCAN DRIVE	22191	0.0
	22233	0.0
	21859	0.0
PLO	22559	0.0
	22079	0.0
RECEIVER	21813	0.0
MIXER/IF AMPLIFIER A1-1	21415	0.0
A1-2	21429	0.0
LO CHANNEL 6	21393	0.0
7	21440	0.0
SPARE	32767	0.0
LO CHANNEL 3	21254	0.0
4	21187	0.0
5	21382	0.0
8	21318	0.0
15	22015	0.0
QUIET BUS CURRENT	16372	0.0
A1-1 NOISY POWER BUS CURRENT	77	0.0
A1-2 NOISY POWER BUS CURRENT	52	0.0

## PRT TEMPERATURES

## VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

## FIXED TARGET

## BASEPLATE

## THERMOCOUPLE TEMPERATURES

## FIXED TARGET SHROUD

## VARIABLE TARGET SHROUD

## FIXED TARGET N2

## VARIABLE TARGET N2

## HEATER N2

## FIXED TARGET FLOW METER

## VARIABLE TARGET FLOW METER

## BASEPLATE HEATER N2

## BASEPLATE N2

## BASEPLATE FLOW METER

## ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00



**TEST DATA SHEET NO. 12** (Sheet 1 of 2)  
Science and Engineering Data Test (Nadir Mode) (Paragraph 3.3.5.3.4)

Step	Instrument Status	(Y)es / (N)o
1	Nadir Mode command received?	<i>Y</i>
2	ENGR OK message seen?	<i>Y</i>
3	Both reflectors positioned at nadir position?	<i>Y</i>

Yes = Pass No = Fail

Step	Element	Description	Measured Value* (Binary)	Required Value (Binary)	(P)ass/(F)ail
4a	1-2	Packet ID		0000100100000011	<i>Pass</i>
4b	3-4	Packet Length		0000001010111111	<i>Pass</i>
4c	5-6	Unit Serial Number		0000001100000000	<i>Pass</i>
4d	7-8	Instrument Mode/ Status		1001101000010000	<i>Pass</i>

RADIOMETER SCENE DATA			
Step	Description	Required Counts	(P)ass/(F)ail
4f	Review All Scene Data	12500-20500	<i>Pass</i>

PRT TEMPERATURE DATA				
Step	Element	Description	Required	(P)ass/(F)ail
4g	1090-1178	Review All PRT Data**	10-40 degrees C	<i>Pass</i>
4g	1180	Temperature Sensor Reference	23244-26317 counts	<i>Pass</i>

STATUS				
Step	Description	Status*	Required Status	(P)ass/(F)ail
4h	Antenna in Full Scan Mode		NO	<i>Pass</i>
	Antenna in Warm Cal Mode		NO	
	Antenna in Cold Cal Mode		NO	
	Antenna in Nadir Mode		YES	
	Cold Cal Position LSB		ZERO	
	Cold Cal Position MSB		ZERO	
	PLO Redundancy		PLO #1	
	Scanner A1-1 Power		ON	
	Scanner A1-2 Power		ON	
	PLO #1 Lock		YES	
	PLO #2 Lock		OFF	
	ADC Latchup Flag		ONE	<i>Pass</i>

\* Rewriting printout data on this data sheet is optional.

\*\* Refer to Table IV for PRT Data Description

EOS/AMSU-A1 System P/N 1356008 Shop Order: *oper. 0580* S/N: *202*  
Circle Test: 1<sup>st</sup> CPT Final CPT Sub CPT *N/A* LPT *N/A*

*[Signature]* *11/20/98*  
Customer Representative Date

*[Signature]* *13 Nov 98*  
Test Systems Engineer Date  
Quality Control Date

**TEST DATA SHEET NO. 12 (Sheet 2 of 2)**  
Science and Engineering Data Test (Nadir Mode) (Paragraph 3.3.5.3.4)

REFLECTOR POSITIONS (Step 4e)						
BP	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
1-30		336	Pass		16368	Pass
* Actual range (min to max) of counts from printout (Only beam positions 1-30). Rewriting counts on this data sheet is optional. ** Required counts from AE26002/1 TDS 5&6 +/- 5 counts for "true" nadir position.						

ENGINEERING DATA				
Step	Description	Measured***	Required	(P)ass/(F)ail
4i	Signal Processor (+5 VDC)		+4 to +6 volts	Pass
	Signal Processor (+15 VDC)		+14 to +16 volts	
	Signal Processor (-15 VDC)		-14 to -16 volts	
	Scan Drive (+5 VDC)		+4 to +6 volts	
	Scan Drive (+15 VDC)		+14 to +16 volts	
	Scan Drive (-15 VDC)		-14 to -16 volts	
	PLO (+15 VDC)		+14 to +16 volts	
	PLO (-15 VDC)		-14 to -16 volts	
	Receiver (+8 VDC)		+7 to +9 volts	
	Mixer/IF Amplifier A1-1 (+10 VDC)		+9 to +11 volts	
	Mixer/IF Amplifier A1-2 (+10 VDC)		+9 to +11 volts	
	LO Channel 6		+9 to +11 volts	
	LO Channel 7		+9 to +11 volts	
	LO Channel 3		+9 to +11 volts	
	LO Channel 4		+9 to +11 volts	
	LO Channel 5		+9 to +11 volts	
	LO Channel 8		+9 to +11 volts	
	LO Channel 15		+14 to +16 volts	
	Quiet Bus Current		$\leq 3$ Amps	
	A1-1 Noisy Bus Current		$\leq 125$ milliamps	
	A1-2 Noisy Bus Current		$\leq 125$ milliamps	Pass

\*\*\* Rewriting printout data on this data sheet is optional.

EOS/AMSU-A1 System P/N 1356008

Circle Test: 1<sup>st</sup> CPT

Final CPT

Shop Order: 560863

S/N: 202

Sub CPT N/A

LPT N/A

Oper. 0580

*Sharon Kuri* DCMC 11/20/98  
Customer Representative Date

*Robert Khawar* 13 Nov. 98  
Test Systems Engineer 7A Date  
200 NOV 19 1998  
Quality Control Date

```

EOS A1-03 L1.EXE;40 NADIR MODE
[ 5 ] SCIENCE DATA ELEMENT 0000
[ 6 ] CONTROL/STATUS ELEMENT 00
[ 7 ] ENGINEERING ELEMENT 00

      COMMANDS
[ 9 ] SCANNER A1-1 POWER = ON
[10 ] SCANNER A1-2 POWER = ON
[11 ] ANTENNA FULL SCAN MODE = NO
[12 ] WARM CAL = NO
[13 ] COLD CAL = NO
[14 ] NADIR = YES

      POWER ON CHECKSUM IN 6267 CALC 6267 SA28 2628 SA29 5240
      SCREEN ONLY [ 2 ] PRINT [ 3 ] FULL [ 1 ] RETURN

SELECT BUTTON 3

```

Panning 3.3.5.3.4 Step 4 NADIR Position  
 Support TDS 12 of AE 26156/9  
 Final CPT - EOS/AMSU-A1 S/N 202  
 S/O 560863 Oper. 0580

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	SCENE DATA BP 17	CH 8
2		00000011	574		CH 9
3	PACKET LENGTH	00000010	576		CH 10
4		10111111	578		CH 11
5	UNIT SERIAL NUMBER	00000011	580		CH 12
6		00000000	582		CH 13
7	INSTRUMENT MODE/STATUS	10011010	584		CH 14
8		00010000	586		CH 15
10	REFLECTOR 1 POSITION 1	334	588	REFLECTOR 1 POSITION 18	334
12	REFLECTOR 2 POSITION 1	16369	590	REFLECTOR 2 POSITION 18	16369
14	REFL 1 POS 1 2ND LOOK	334	592	REFL 1 POS 18 2ND LOOK	334
16	REFL 2 POS 1 2ND LOOK	16369	594	REFL 2 POS 18 2ND LOOK	16369
18	SCENE DATA BP 1	15903	596	SCENE DATA BP 18	15904
20		16379	598		CH 3
22		16379	598		CH 4
24		15567	600		CH 5
26		17109	602		CH 6
28		15521	604		CH 7
30		16548	606		CH 8
32		16320	608		CH 9
34		16492	610		CH 10
36		17475	612		CH 11
38		17638	614		CH 12
40		17510	616		CH 13
42		19192	618		CH 14
44		16436	620		CH 15
46	REFLECTOR 1 POSITION 2	334	622	REFLECTOR 1 POSITION 19	334
48	REFLECTOR 2 POSITION 2	16369	624	REFLECTOR 2 POSITION 19	16369
50	REFL 1 POS 2 2ND LOOK	334	626	REFL 1 POS 19 2ND LOOK	334
52	REFL 2 POS 2 2ND LOOK	16369	628	REFL 2 POS 19 2ND LOOK	16369
54	SCENE DATA BP 2	15904	630	SCENE DATA BP 19	15900
56		16378	632		CH 3
58		15567	634		CH 4
60		17104	636		CH 5
62		15517	638		CH 6
64		16549	640		CH 7
66		16319	642		CH 8
68		16489	644		CH 9
70		17483	646		CH 10
72		17629	648		CH 11
74		17514	650		CH 12
76		19194	652		CH 13
78		16438	654		CH 14
80	REFLECTOR 1 POSITION 3	334	656	REFLECTOR 1 POSITION 20	16436
82	REFLECTOR 2 POSITION 3	16369	658	REFLECTOR 2 POSITION 20	334
84	REFL 1 POS 3 2ND LOOK	334	660	REFL 1 POS 20 2ND LOOK	16369
86	REFL 2 POS 3 2ND LOOK	16369	662	REFL 2 POS 20 2ND LOOK	334
88	SCENE DATA BP 3	15902	664	SCENE DATA BP 20	16369
90		16381	666		CH 3
92		15567	668		CH 4
		17106	670		CH 5
					CH 6

## FULL SCAN MODE

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15523	672	CH 7	15521
96	CH 8	16548	674	CH 8	16551
98	CH 9	16319	676	CH 9	16317
100	CH 10	16488	678	CH 10	16484
102	CH 11	17480	680	CH 11	17480
104	CH 12	17640	682	CH 12	17632
106	CH 13	17508	684	CH 13	17507
108	CH 14	19174	686	CH 14	19201
110	CH 15	16435	688	CH 15	16437
112	REFLECTOR 1 POSITION 4	334	690	REFLECTOR 1 POSITION 21	334
114	REFLECTOR 2 POSITION 4	16369	692	REFLECTOR 2 POSITION 21	16369
116	REFL 1 POS 4 2ND LOOK	334	694	REFL 1 POS 21 2ND LOOK	334
118	REFL 2 POS 4 2ND LOOK	16369	696	REFL 2 POS 21 2ND LOOK	16369
120	SCENE DATA BP 4	15904	698	SCENE DATA BP 21	15899
122	CH 3	16378	700	CH 3	16383
124	CH 4	15566	702	CH 4	15566
126	CH 5	17104	704	CH 5	17104
128	CH 6	15523	706	CH 6	15520
130	CH 7	16548	708	CH 7	16551
132	CH 8	16315	710	CH 8	16319
134	CH 9	16489	712	CH 9	16487
136	CH 10	17475	714	CH 10	17486
138	CH 11	17629	716	CH 11	17626
140	CH 12	17502	718	CH 12	17503
142	CH 13	19200	720	CH 13	19186
144	CH 14	16438	722	CH 14	16436
146	CH 15	334	724	CH 15	334
148	REFLECTOR 1 POSITION 5	16369	726	REFLECTOR 1 POSITION 22	16369
150	REFLECTOR 2 POSITION 5	334	728	REFLECTOR 2 POSITION 22	334
152	REFL 1 POS 5 2ND LOOK	16369	730	REFL 1 POS 22 2ND LOOK	16369
154	REFL 2 POS 5 2ND LOOK	15902	732	REFL 2 POS 22 2ND LOOK	15902
156	SCENE DATA BP 5	16383	734	SCENE DATA BP 22	16382
158	CH 3	15562	736	CH 3	15566
160	CH 4	17106	738	CH 4	17109
162	CH 5	15518	740	CH 5	15522
164	CH 6	16552	742	CH 6	15522
166	CH 7	16318	744	CH 7	16552
168	CH 8	16489	746	CH 8	16319
170	CH 9	17482	748	CH 9	16485
172	CH 10	17634	750	CH 10	17481
174	CH 11	17500	752	CH 11	17640
176	CH 12	19177	754	CH 12	17500
178	CH 13	16437	756	CH 13	19195
180	CH 14	334	758	CH 14	16438
182	CH 15	16369	760	CH 15	334
184	REFLECTOR 1 POSITION 6	16369	762	REFLECTOR 1 POSITION 23	16369
186	REFLECTOR 2 POSITION 6	334	764	REFLECTOR 2 POSITION 23	334
188	REFL 1 POS 6 2ND LOOK	16369	766	REFL 1 POS 23 2ND LOOK	16369
190	REFL 2 POS 6 2ND LOOK	15900	768	REFL 2 POS 23 2ND LOOK	15903
192	SCENE DATA BP 6	16379	770	SCENE DATA BP 23	16381
	CH 3	15563		CH 3	15565
	CH 4			CH 4	
	CH 5			CH 5	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17105	772	CH 6	17108
196	CH 7	15521	774	CH 7	15521
198	CH 8	16547	776	CH 8	16552
200	CH 9	16319	778	CH 9	16316
202	CH 10	16487	780	CH 10	16488
204	CH 11	17482	782	CH 11	17483
206	CH 12	17633	784	CH 12	17633
208	CH 13	17497	786	CH 13	17500
210	CH 14	19187	788	CH 14	19197
212	CH 15	16435	790	CH 15	16436
214	REFLECTOR 1 POSITION 7	334	792	REFLECTOR 1 POSITION 24	334
216	REFLECTOR 2 POSITION 7	16369	794	REFLECTOR 2 POSITION 24	16369
218	REFL 1 POS 7 2ND LOOK	334	796	REFL 1 POS 24 2ND LOOK	334
220	REFL 2 POS 7 2ND LOOK	16369	798	REFL 2 POS 24 2ND LOOK	16369
222	SCENE DATA BP 7	15900	800	SCENE DATA BP 24	15903
224	CH 3	16381	802	CH 3	16385
226	CH 4	15566	804	CH 4	15562
228	CH 5	17106	806	CH 5	17109
230	CH 6	15522	808	CH 6	15518
232	CH 7	16552	810	CH 7	16554
234	CH 8	16321	812	CH 8	16321
236	CH 9	16490	814	CH 9	16487
238	CH 10	17482	816	CH 10	17477
240	CH 11	17631	818	CH 11	17627
242	CH 12	17512	820	CH 12	17502
244	CH 13	19198	822	CH 13	19195
246	CH 14	16437	824	CH 14	16436
248	CH 15	334	826	CH 15	334
250	REFLECTOR 1 POSITION 8	16369	828	REFLECTOR 1 POSITION 25	16369
252	REFLECTOR 2 POSITION 8	334	830	REFLECTOR 2 POSITION 25	334
254	REFL 1 POS 8 2ND LOOK	16369	832	REFL 1 POS 25 2ND LOOK	16369
256	REFL 2 POS 8 2ND LOOK	15902	834	REFL 2 POS 25 2ND LOOK	15904
258	SCENE DATA BP 8	16382	836	SCENE DATA BP 25	16383
260	CH 3	15565	838	CH 3	15568
262	CH 4	17104	840	CH 4	17106
264	CH 5	15523	842	CH 5	15519
266	CH 6	16549	844	CH 6	16547
268	CH 7	16321	846	CH 7	16322
270	CH 8	16481	848	CH 8	16489
272	CH 9	17478	850	CH 9	17481
274	CH 10	17631	852	CH 10	17631
276	CH 11	17506	854	CH 11	17504
278	CH 12	19171	856	CH 12	19181
280	CH 13	16437	858	CH 13	16438
282	CH 14	334	860	CH 14	334
284	REFLECTOR 1 POSITION 9	16369	862	REFLECTOR 1 POSITION 26	16369
286	REFLECTOR 2 POSITION 9	334	864	REFLECTOR 2 POSITION 26	334
288	REFL 1 POS 9 2ND LOOK	16369	866	REFL 1 POS 26 2ND LOOK	16369
290	REFL 2 POS 9 2ND LOOK	15905	868	REFL 2 POS 26 2ND LOOK	15902
292	SCENE DATA BP 9	16379	870	SCENE DATA BP 26	16380

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15567	872	CH 5	15567
296	CH 6	17103	874	CH 6	17107
298	CH 7	15524	876	CH 7	15521
300	CH 8	16551	878	CH 8	16548
302	CH 9	16319	880	CH 9	16320
304	CH 10	16488	882	CH 10	16493
306	CH 11	17482	884	CH 11	17483
308	CH 12	17628	886	CH 12	17633
310	CH 13	17498	888	CH 13	17507
312	CH 14	19206	890	CH 14	19200
314	CH 15	16438	892	CH 15	16436
316	REFLECTOR 1 POSITION 10	334	894	REFLECTOR 1 POSITION 27	334
318	REFLECTOR 2 POSITION 10	16369	896	REFLECTOR 2 POSITION 27	16369
320	REFL 1 POS 10 2ND LOOK	334	898	REFL 1 POS 27 2ND LOOK	334
322	REFL 2 POS 10 2ND LOOK	16369	900	REFL 2 POS 27 2ND LOOK	16369
324	SCENE DATA BP 10	15901	902	SCENE DATA BP 27	15900
326	CH 4	16380	904	CH 4	16384
328	CH 5	15566	906	CH 5	15570
330	CH 6	17105	908	CH 6	17105
332	CH 7	15520	910	CH 7	15523
334	CH 8	16548	912	CH 8	16551
336	CH 9	16316	914	CH 9	16316
338	CH 10	16495	916	CH 10	16492
340	CH 11	17479	918	CH 11	17483
342	CH 12	17632	920	CH 12	17643
344	CH 13	17515	922	CH 13	17510
346	CH 14	19195	924	CH 14	19195
348	CH 15	16438	926	CH 15	16439
350	REFLECTOR 1 POSITION 11	334	928	REFLECTOR 1 POSITION 28	334
352	REFLECTOR 2 POSITION 11	16369	930	REFLECTOR 2 POSITION 28	16369
354	REFL 1 POS 11 2ND LOOK	334	932	REFL 1 POS 28 2ND LOOK	334
356	REFL 2 POS 11 2ND LOOK	16369	934	REFL 2 POS 28 2ND LOOK	16369
358	SCENE DATA BP 11	15903	936	SCENE DATA BP 28	15902
360	CH 4	16381	938	CH 4	16383
362	CH 5	15563	940	CH 5	15568
364	CH 6	17102	942	CH 6	17105
366	CH 7	15521	944	CH 7	15521
368	CH 8	16552	946	CH 8	16547
370	CH 9	16320	948	CH 9	16322
372	CH 10	16487	950	CH 10	16491
374	CH 11	17481	952	CH 11	17477
376	CH 12	17626	954	CH 12	17628
378	CH 13	17507	956	CH 13	17498
380	CH 14	19192	958	CH 14	19209
382	CH 15	16437	960	CH 15	16435
384	REFLECTOR 1 POSITION 12	334	962	REFLECTOR 1 POSITION 29	334
386	REFLECTOR 2 POSITION 12	16369	964	REFLECTOR 2 POSITION 29	16369
388	REFL 1 POS 12 2ND LOOK	334	966	REFL 1 POS 29 2ND LOOK	334
390	REFL 2 POS 12 2ND LOOK	16369	968	REFL 2 POS 29 2ND LOOK	16369
392	SCENE DATA BP 12	15900	970	SCENE DATA BP 29	15909

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16383	972	CH 4	16384
396	CH 5	15564	974	CH 5	15565
398	CH 6	17108	976	CH 6	17103
400	CH 7	15523	978	CH 7	15523
402	CH 8	16552	980	CH 8	16550
404	CH 9	16318	982	CH 9	16322
406	CH 10	16493	984	CH 10	16484
408	CH 11	17478	986	CH 11	17481
410	CH 12	17643	988	CH 12	17634
412	CH 13	17494	990	CH 13	17507
414	CH 14	19196	992	CH 14	19194
416	CH 15	16437	994	CH 15	16437
418	REFLECTOR 1 POSITION 13	334	996	REFLECTOR 1 POSITION 30	334
420	REFLECTOR 2 POSITION 13	16369	998	REFLECTOR 2 POSITION 30	16369
422	REFL 1 POS 13 2ND LOOK	334	1000	REFL 1 POS 30 2ND LOOK	334
424	REFL 2 POS 13 2ND LOOK	16369	1002	REFL 2 POS 30 2ND LOOK	16369
426	SCENE DATA BP 13	15899	1004	SCENE DATA BP 30	15906
428	CH 4	16382	1006	CH 4	16381
430	CH 5	15567	1008	CH 5	15566
432	CH 6	17106	1010	CH 6	17108
434	CH 7	15522	1012	CH 7	15521
436	CH 8	16552	1014	CH 8	16553
438	CH 9	16318	1016	CH 9	16319
440	CH 10	16491	1018	CH 10	16489
442	CH 11	17486	1020	CH 11	17480
444	CH 12	17635	1022	CH 12	17629
446	CH 13	17493	1024	CH 13	17507
448	CH 14	19220	1026	CH 14	19168
450	CH 15	16436	1028	CH 15	16438
452	REFLECTOR 1 POSITION 14	334	1030	REFLECTOR 1 COLD CAL POS	0E
454	REFLECTOR 2 POSITION 14	16369	1032	REFLECTOR 2 COLD CAL POS	0E
456	REFL 1 POS 14 2ND LOOK	334	1034	REFL 1 COLD CAL 2ND LOOK	0E
458	REFL 2 POS 14 2ND LOOK	16369	1036	REFL 2 COLD CAL 2ND LOOK	0E
460	SCENE DATA BP 14	15898	1038	COLD CAL DATA 1	0
462	CH 4	16385	1040	CH 3	0
464	CH 5	15564	1042	CH 4	0
466	CH 6	17102	1044	CH 5	0
468	CH 7	15521	1046	CH 6	0
470	CH 8	16551	1048	CH 7	0
472	CH 9	16316	1050	CH 8	0
474	CH 10	16488	1052	CH 9	0
476	CH 11	17481	1054	CH 10	0
478	CH 12	17641	1056	CH 11	0
480	CH 13	17515	1058	CH 12	0
482	CH 14	19202	1060	CH 13	0
484	CH 15	16438	1062	CH 14	0
486	REFLECTOR 1 POSITION 15	334	1064	CH 15	0
488	REFLECTOR 2 POSITION 15	16369	1066	REFL 1 POS 3	0
490	REFL 1 POS 15 2ND LOOK	334	1068	REFL 2 POS 3	0
492	REFL 2 POS 15 2ND LOOK	16369	1070	REFL 1 POS 4	0
				REFL 2 POS 4	0
				REFL 1 POS 5	0
				REFL 2 POS 5	0
				REFL 1 POS 6	0
				REFL 2 POS 6	0
				REFL 1 POS 7	0
				REFL 2 POS 7	0
				REFL 1 POS 8	0
				REFL 2 POS 8	0
				REFL 1 POS 9	0
				REFL 2 POS 9	0
				REFL 1 POS 10	0
				REFL 2 POS 10	0
				REFL 1 POS 11	0
				REFL 2 POS 11	0
				REFL 1 POS 12	0
				REFL 2 POS 12	0
				REFL 1 POS 13	0
				REFL 2 POS 13	0
				REFL 1 POS 14	0
				REFL 2 POS 14	0
				REFL 1 POS 15	0
				REFL 2 POS 15	0
				REFL 1 POS 16	0
				REFL 2 POS 16	0
				REFL 1 POS 17	0
				REFL 2 POS 17	0
				REFL 1 POS 18	0
				REFL 2 POS 18	0
				REFL 1 POS 19	0
				REFL 2 POS 19	0
				REFL 1 POS 20	0
				REFL 2 POS 20	0
				REFL 1 POS 21	0
				REFL 2 POS 21	0
				REFL 1 POS 22	0
				REFL 2 POS 22	0
				REFL 1 POS 23	0
				REFL 2 POS 23	0
				REFL 1 POS 24	0
				REFL 2 POS 24	0
				REFL 1 POS 25	0
				REFL 2 POS 25	0
				REFL 1 POS 26	0
				REFL 2 POS 26	0
				REFL 1 POS 27	0
				REFL 2 POS 27	0
				REFL 1 POS 28	0
				REFL 2 POS 28	0
				REFL 1 POS 29	0
				REFL 2 POS 29	0
				REFL 1 POS 30	0
				REFL 2 POS 30	0
				REFL 1 POS 31	0
				REFL 2 POS 31	0
				REFL 1 POS 32	0
				REFL 2 POS 32	0
				REFL 1 POS 33	0
				REFL 2 POS 33	0
				REFL 1 POS 34	0
				REFL 2 POS 34	0
				REFL 1 POS 35	0
				REFL 2 POS 35	0
				REFL 1 POS 36	0
				REFL 2 POS 36	0
				REFL 1 POS 37	0
				REFL 2 POS 37	0
				REFL 1 POS 38	0
				REFL 2 POS 38	0
				REFL 1 POS 39	0
				REFL 2 POS 39	0
				REFL 1 POS 40	0
				REFL 2 POS 40	0
				REFL 1 POS 41	0
				REFL 2 POS 41	0
				REFL 1 POS 42	0
				REFL 2 POS 42	0
				REFL 1 POS 43	0
				REFL 2 POS 43	0
				REFL 1 POS 44	0
				REFL 2 POS 44	0
				REFL 1 POS 45	0
				REFL 2 POS 45	0
				REFL 1 POS 46	0
				REFL 2 POS 46	0
				REFL 1 POS 47	0
				REFL 2 POS 47	0
				REFL 1 POS 48	0
				REFL 2 POS 48	0
				REFL 1 POS 49	0
				REFL 2 POS 49	0
				REFL 1 POS 50	0
				REFL 2 POS 50	0
				REFL 1 POS 51	0
				REFL 2 POS 51	0
				REFL 1 POS 52	0
				REFL 2 POS 52	0
				REFL 1 POS 53	0
				REFL 2 POS 53	0
				REFL 1 POS 54	0
				REFL 2 POS 54	0
				REFL 1 POS 55	0
				REFL 2 POS 55	0
				REFL 1 POS 56	0
				REFL 2 POS 56	0
				REFL 1 POS 57	0
				REFL 2 POS 57	0
				REFL 1 POS 58	0
				REFL 2 POS 58	0
				REFL 1 POS 59	0
				REFL 2 POS 59	0
				REFL 1 POS 60	0
				REFL 2 POS 60	0
				REFL 1 POS 61	0
				REFL 2 POS 61	0
				REFL 1 POS 62	0
				REFL 2 POS 62	0
				REFL 1 POS 63	0
				REFL 2 POS 63	0
				REFL 1 POS 64	0
				REFL 2 POS 64	0
				REFL 1 POS 65	0
				REFL 2 POS 65	0
				REFL 1 POS 66	0
				REFL 2 POS 66	0
				REFL 1 POS 67	0
				REFL 2 POS 67	0
				REFL 1 POS 68	0
				REFL 2 POS 68	0
				REFL 1 POS 69	0
				REFL 2 POS 69	0
				REFL 1 POS 70	0
				REFL 2 POS 70	0
				REFL 1 POS 71	0
				REFL 2 POS 71	0
				REFL 1 POS 72	0
				REFL 2 POS 72	0
				REFL 1 POS 73	0
				REFL 2 POS 73	0
				REFL 1 POS 74	0
				REFL 2 POS 74	0
				REFL 1 POS 75	0
				REFL 2 POS 75	0
				REFL 1 POS 76	0
				REFL 2 POS 76	0
				REFL 1 POS 77	0
				REFL 2 POS 77	0
				REFL 1 POS 78	0
				REFL 2 POS 78	0
				REFL 1 POS 79	0
				REFL 2 POS 79	0
				REFL 1 POS 80	0
				REFL 2 POS 80	0
				REFL 1 POS 81	0
				REFL 2 POS 81	0
				REFL 1 POS 82	0
				REFL 2 POS 82	0
				REFL 1 POS 83	0
				REFL 2 POS 83	0
				REFL 1 POS 84	0
				REFL 2 POS 84	0
				REFL 1 POS 85	0
				REFL 2 POS 85	0
				REFL 1 POS 86	0
				REFL 2 POS 86	0
				REFL 1 POS 87	0
				REFL 2 POS 87	0
				REFL 1 POS 88	0
				REFL 2 POS 88	0
				REFL 1 POS 89	0
				REFL 2 POS 89	0
				REFL 1 POS 90	0
				REFL 2 POS 90	0
				REFL 1 POS 91	0
				REFL 2 POS 91	0
				REFL 1 POS 92	0
				REFL 2 POS 92	0
				REFL 1 POS 93	0
				REFL 2 POS 93	0
				REFL 1 POS 94	0
				REFL 2 POS 94	0
				REFL 1 POS 95	0
				REFL 2 POS 95	0
				REFL 1 POS 96	0
				REFL 2 POS 96	0
				REFL 1 POS 97	0
				REFL 2 POS 97	0
				REFL 1 POS 98	0
				REFL 2 POS 98	0
				REFL 1 POS 99	0
				REFL 2 POS 99	0
				REFL 1 POS 100	0
				REFL 2 POS 100	0
				REFL 1 POS 101	0
				REFL 2 POS 101	0
				REFL 1 POS 102	0
				REFL 2 POS 102	0
				REFL 1 POS 103	0
				REFL 2 POS 103	0
				REFL 1 POS 104	0
				REFL 2 POS 104	0
				REFL 1 POS 105	0
				REFL 2 POS 105	0
				REFL 1 POS 106	0
				REFL 2 POS 106	0
				REFL 1 POS 107	0
				REFL 2 POS 107	0
				REFL 1 POS 108	0
				REFL 2 POS 108	0
				REFL 1 POS 109	0
				REFL 2 POS 109	0
				REFL 1 POS 110	0
				REFL 2 POS 110	0
				REFL 1 POS 111	0
				REFL 2 POS 111	0
				REFL 1 POS 112	0
				REFL 2 POS 112	0
				REFL 1 POS 113	0
				REFL 2 POS 113	0
				REFL 1 POS 114	0
				REFL 2 POS 114	0
				REFL 1 POS 115	0
				REFL 2 POS 115	0
				REFL 1 POS 116	0
				REFL 2 POS 116	0
				REFL 1 POS 117	0
				REFL 2 POS 117	0
				REFL 1 POS 118	0
				REFL 2 POS 118	0
				REFL 1 POS 119	0
				REFL 2 POS 119	0
				REFL 1 POS 120	0
				REFL 2 POS 120	0
				REFL 1 POS 121	0
				REFL 2 POS 121	0



ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	SCENE DATA BP 15	CH 3	1072		CH 7
496		CH 4	1074		CH 8
498		CH 5	1076		CH 9
500		CH 6	1078		CH 10
502		CH 7	1080		CH 11
504		CH 8	1082		CH 12
506		CH 9	1084		CH 13
508		CH 10	1086		CH 14
510		CH 11	1088		CH 15
512		CH 12	1182	REFLECTOR 1 WARM CAL POS	OE
514		CH 13	1184	REFLECTOR 2 WARM CAL POS	OE
516		CH 14	1186	REFL 1 WARM CAL 2ND LOOK	OE
518		CH 15	1188	REFL 2 WARM CAL 2ND LOOK	OE
520	REFLECTOR 1 POSITION 16	CH 3	1190	WARM CAL DATA 1	0
522	REFLECTOR 2 POSITION 16	CH 4	1192		0
524	REFL 1 POS 16 2ND LOOK	CH 5	1194		0
526	REFL 2 POS 16 2ND LOOK	CH 6	1196		0
528	SCENE DATA BP 16	CH 3	1198		0
530		CH 4	1200		0
532		CH 5	1202		0
534		CH 6	1204		0
536		CH 7	1206		0
538		CH 8	1208		0
540		CH 9	1210		0
542		CH 10	1212		0
544		CH 11	1214		0
546		CH 12	1216	WARM CAL DATA 2	0
548		CH 13	1218		0
550		CH 14	1220		0
552		CH 15	1222		0
554	REFLECTOR 1 POSITION 17	CH 3	1224		0
556	REFLECTOR 2 POSITION 17	CH 4	1226		0
558	REFL 1 POS 17 2ND LOOK	CH 5	1228		0
560	REFL 2 POS 17 2ND LOOK	CH 6	1230		0
562	SCENE DATA BP 17	CH 3	1232		0
564		CH 4	1234		0
566		CH 5	1236		0
568		CH 6	1238		0
570		CH 7	1240		0

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	18481	23.83
1092	SCAN MOTOR A1-2	19896	25.83
1094	FEED HORN A1-1	21046	29.07
1096	FEED HORN A1-2	22273	31.48
1098	RF MUX A1-1	23277	33.21
1100	RF MUX A1-2	24642	36.01
1102	LOCAL OSCILLATOR CHANNEL 3	25590	38.05
1104	LOCAL OSCILLATOR CHANNEL 4	26003	38.18
1106	LOCAL OSCILLATOR CHANNEL 5	24797	36.48
1108	LOCAL OSCILLATOR CHANNEL 6	23478	32.98
1110	LOCAL OSCILLATOR CHANNEL 7	24008	34.74
1112	LOCAL OSCILLATOR CHANNEL 8	25366	37.46
1114	LOCAL OSCILLATOR CHANNEL 15	25074	36.41
1116	PLLO #2	23264	33.22
1118	PLLO #1	26177	38.92
1120	1553 INTERFACE	19256	38.48
1122	MIXER/IF AMPLIFIER CHANNEL 3	24953	36.52
1124	MIXER/IF AMPLIFIER CHANNEL 4	25113	36.37
1126	MIXER/IF AMPLIFIER CHANNEL 5	24690	35.94
1128	MIXER/IF AMPLIFIER CHANNEL 6	23583	33.80
1130	MIXER/IF AMPLIFIER CHANNEL 7	23617	34.42
1132	MIXER/IF AMPLIFIER CHANNEL 8	25038	36.57
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	23049	33.00
1136	MIXER/IF AMPLIFIER CHANNEL 15	24839	36.48
1138	IF AMPLIFIER CHANNEL 11 THRU 14	24584	35.79
1140	IF AMPLIFIER CHANNEL 9	24771	36.05
1142	IF AMPLIFIER CHANNEL 10	24615	36.02
1144	IF AMPLIFIER CHANNEL 11	23778	33.53
1146	DC/DC CONVERTER	25964	37.80
1148	IF AMPLIFIER CHANNEL 13	23356	32.82
1150	IF AMPLIFIER CHANNEL 14	23716	33.97
1152	IF AMPLIFIER CHANNEL 12	23526	33.39
1154	RF SHELF A1-1	23997	34.59
1156	RF SHELF A1-2	24695	35.33
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	21614	30.01
1160	A1-1 WARM LOAD 1	24276	25.53
1162	A1-1 WARM LOAD 2	24780	25.66
1164	A1-1 WARM LOAD 3	24274	25.68
1166	A1-1 WARM LOAD 4	24353	25.65
1168	A1-1 WARM LOAD CENTER	24555	25.68
1170	A1-2 WARM LOAD 1	25705	27.83
1172	A1-2 WARM LOAD 2	25765	27.85
1174	A1-2 WARM LOAD 3	25772	27.84
1176	A1-2 WARM LOAD 4	25765	27.73
1178	A1-2 WARM LOAD CENTER	25773	27.83
1180	TEMP SENSOR REFERENCE VOLTAGE	25273	

DESCRIPTION	STATUS
ANTENNA IN FULL SCAN MODE	NO
ANTENNA IN WARM CAL MODE	NO
ANTENNA IN COLD CAL MODE	NO
ANTENNA IN NADIR MODE	YES
COLD CAL. POSITION LSB	ZERO
COLD CAL. POSITION MSB	ZERO
PLO REDUNDANCY	PLO # 1
SCANNER A1-1 POWER	ON
SCANNER A1-2 POWER	ON
PLO #1 LOCK	YES
PLO #2 LOCK	OFF
ADC LATCHUP FLAG	ONE

ENGINEERING DATA		
DESCRIPTION		DBG C
A1-1 SCANNER MOTOR TEMPERATURE		23.5
A1-1 RF SHELF TEMPERATURE #1		31.4
A1-1 WARM LOAD TEMPERATURE		25.0
A1-2 SCANNER MOTOR TEMPERATURE		26.1
A1-2 RF SHELF TEMPERATURE #1		35.8
A1-2 WARM LOAD TEMPERATURE		27.2
A1-1 RF SHELF TEMPERATURE #2		31.2
A1-2 RF SHELF TEMPERATURE #2		35.5
DESCRIPTION	VALUE	MA/VOLTS
SIGNAL PROCESSOR	22062	4.9
	21835	15.1
	21799	-15.0
SCAN DRIVE	22178	4.9
	22198	14.9
	21854	-15.1
PLO	22560	14.8
	22083	-15.2
RECEIVER	21812	7.9
MIXER/IF AMPLIFIER A1-1	21414	10.0
A1-2	21430	10.0
LO CHANNEL 6	21392	10.0
7	21444	10.0
SPARE	32767	327.7
LO CHANNEL 3	21256	10.1
4	21178	10.1
5	21382	10.0
8	21306	10.0
15	22015	15.0
QUIET BUS CURRENT	16291	2237.2
A1-1 NOISY POWER BUS CURRENT	69	0.2
A1-2 NOISY POWER BUS CURRENT	44	0.1

## PRT TEMPERATURES

## VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

## FIXED TARGET

## BASEPLATE

## THERMOCOUPLE TEMPERATURES

## FIXED TARGET SHROUD

## VARIABLE TARGET SHROUD

## FIXED TARGET N2

## VARIABLE TARGET N2

## HEATER N2

## FIXED TARGET FLOW METER

## VARIABLE TARGET FLOW METER

## BASEPLATE HEATER N2

## BASEPLATE N2

## BASEPLATE FLOW METER

## ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00

**TEST DATA SHEET NO. 13**

Noisy Bus Current Measurement During Warm Cal, Cold Cal and Nadir (Paragraph 3.3.5.3.5)

Instrument Mode	Noisy Bus Current (mA)	Pass/Fail
Warm Cal A1-1 & A1-2 Scanner ON	26	Not Applicable
A1-1 Scanner / A1-2 Scanner OFF / ON	20	
A1-2 Scanner / A1-1 Scanner OFF / ON	21	
A1-1 Scanner / A1-2 Scanner OFF / OFF	14	
Cold Cal A1-1 & A1-2 Scanner ON	29	Not Applicable
Nadir A1-1 & A1-2 Scanner ON	26	
		Not Applicable

EOS/AMSU-A1 System P/N 1356008

Shop Order: 560863

S/N: 202

Circle Test: 1<sup>st</sup> CPT Final CPT

Sub CPT \_\_\_\_\_

LPT \_\_\_\_\_

[Signature]  
Customer Representative

11/30/98  
Date

[Signature]  
Test Systems Engineer

Quality Control

11/12/98  
Date  
200 NOV 19 1998  
Date

TEST DATA SHEET NO. 14  
1553 Bus Interface Test (Paragraph 3.3.5.4)

ATTACH BUS A WAVE FORM

Bus A Amplitude 20.4 VP-P : 18.0 - 27.0 VP-P  
Bus A Rise Time 220 nsec : 100 - 300 nsec

P/F

P  
P

ATTACH BUS B WAVE FORM

Bus B Amplitude 20.9 VP-P : 18.0 - 27.0 VP-P  
Bus B Rise Time 220 nsec : 100 - 300 nsec

P/F

P  
P

1<sup>st</sup> CPT: \_\_\_\_\_; Final CPT X  
S/O: 560863  
P/N: 1356008-1  
SN: 202

Test Engineer

Quality Control

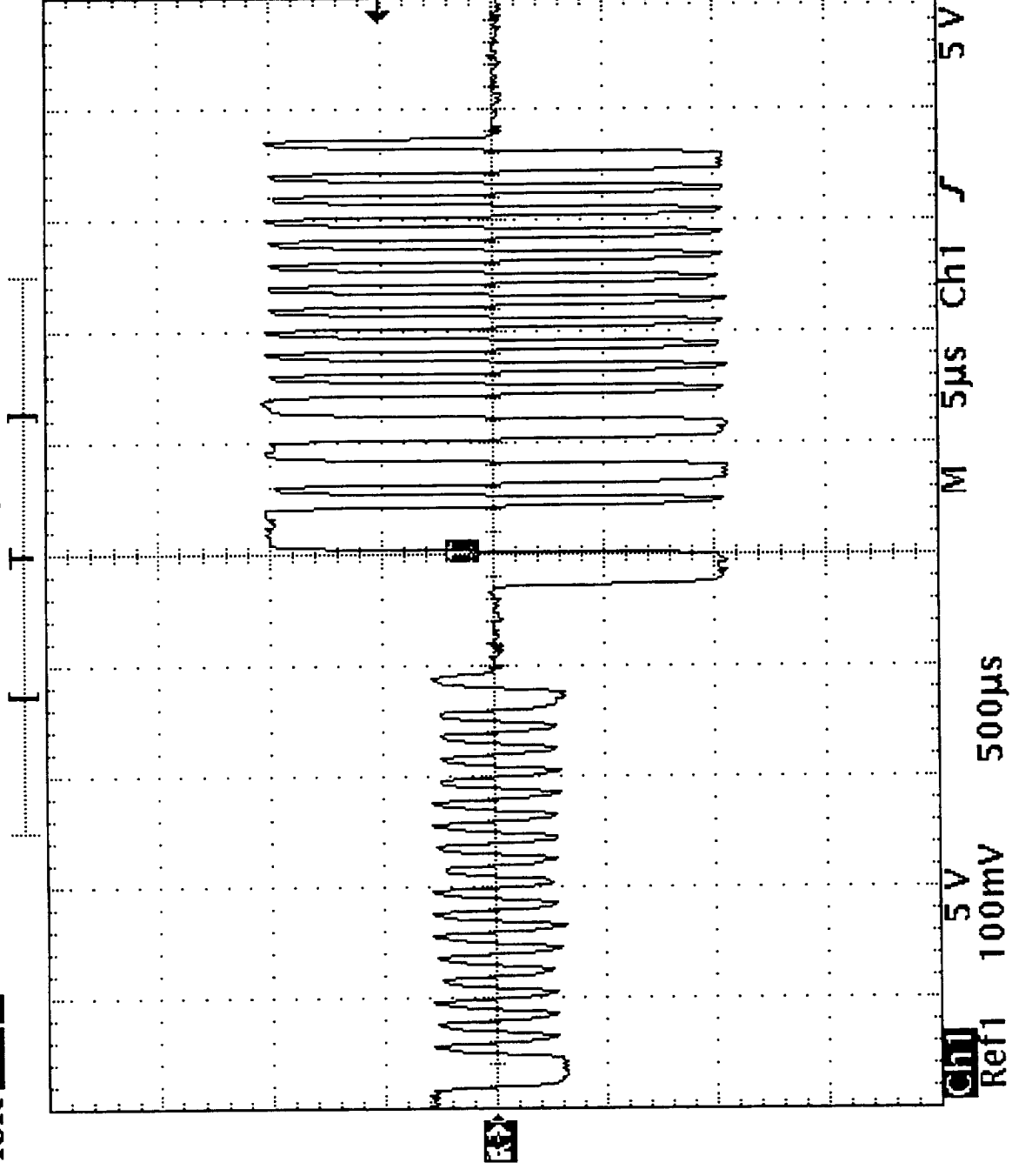
R. Hail 11/17/98  
NOV 19 1998

Date

Date

Tek Stop: 10MS/s

10 Acqs



17 Nov 1998  
13:47:59

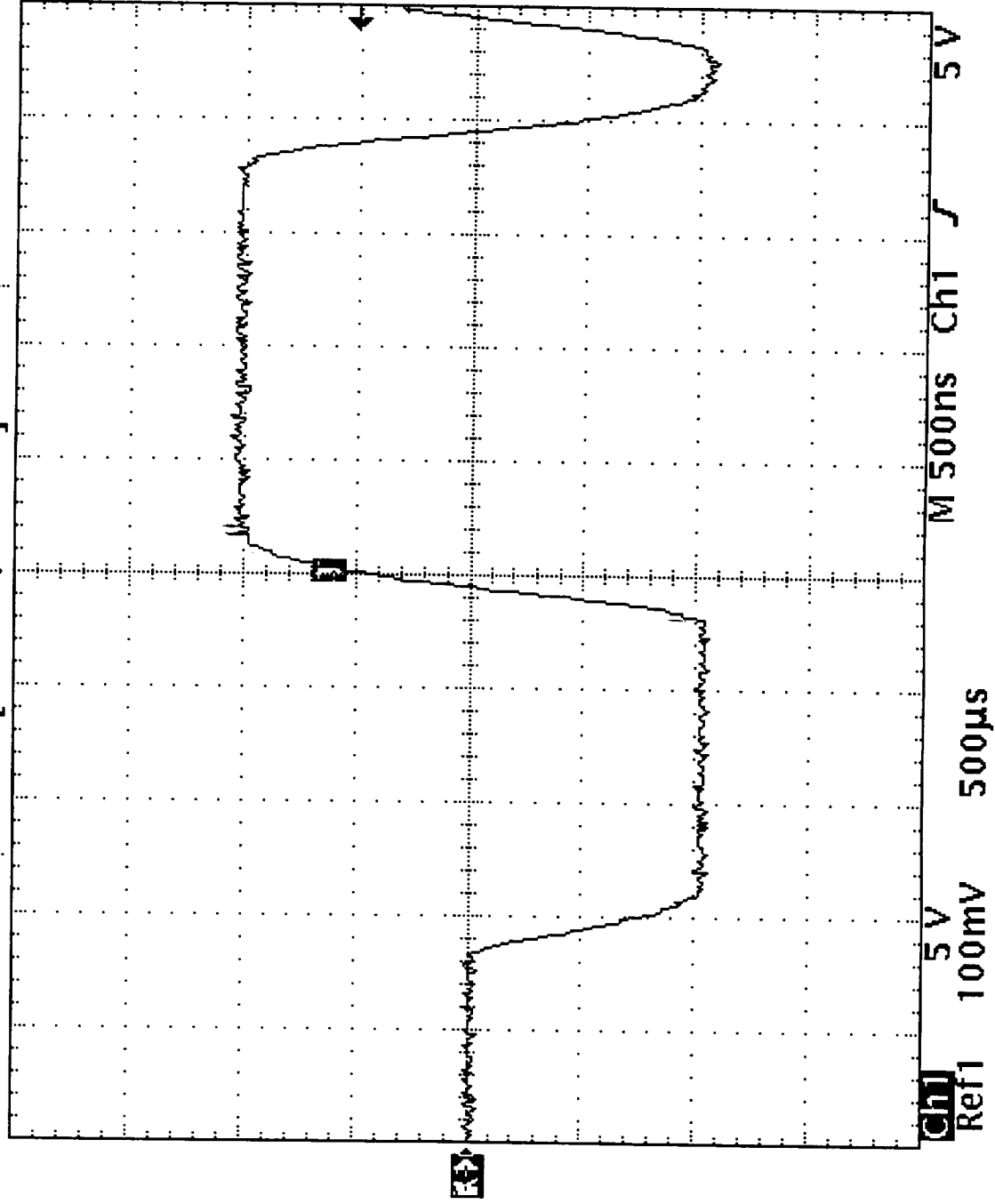
Final QPT Para 33.54 Ch. "A" Amplitude

EOS A1 S/N 202 TDS 13

Tek Stop: 100MS/s

5 Acqs

[ ]



17 Nov 1998  
13:49:52

Channel "A" Rise Time

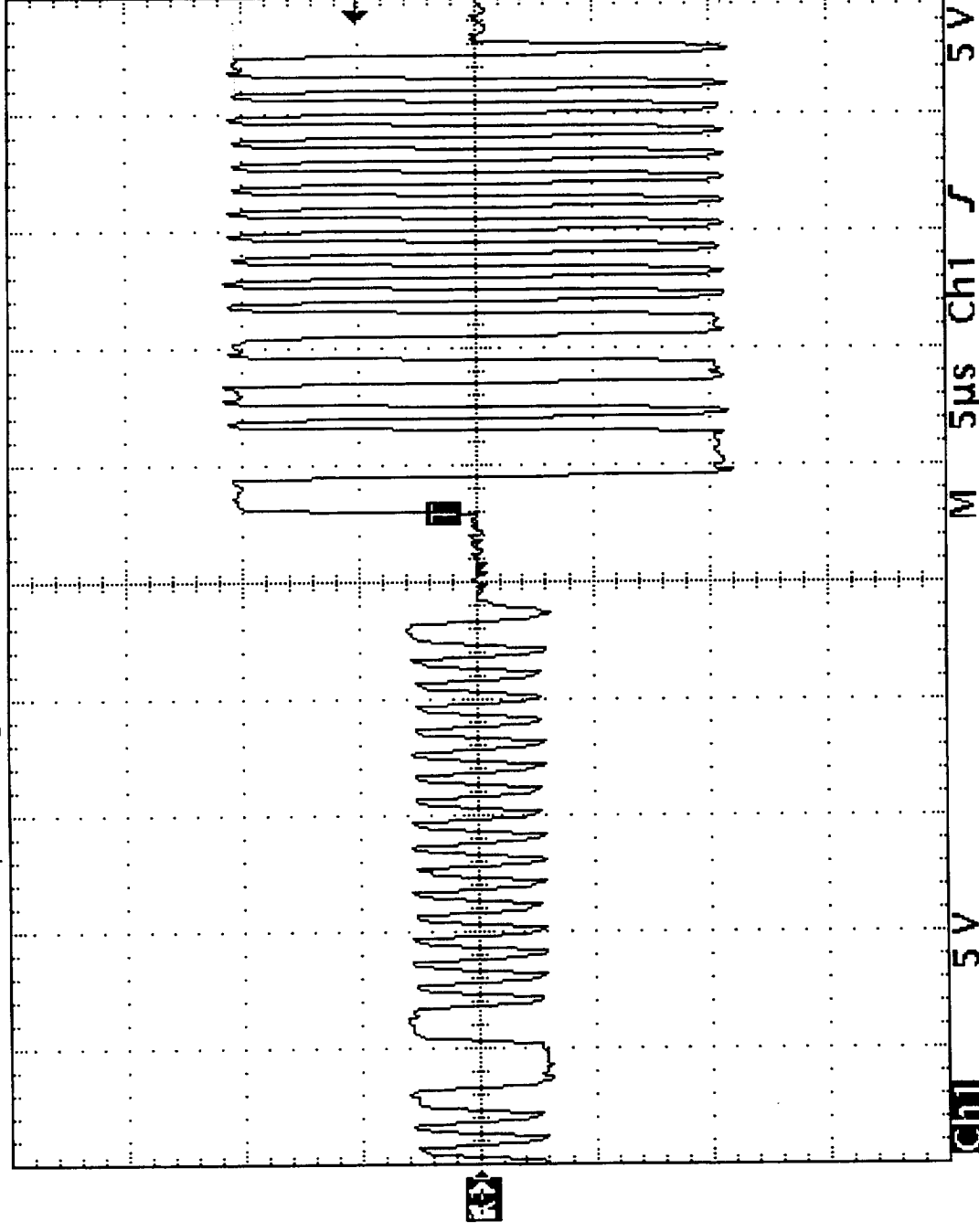
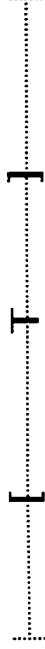
Final CPT Para 33.5.4

EOS A1 S/N 202



Tek Stop: 10MS/s

15 Acqs



Ch1

5V

Ref1 100mV

500µs

M

5µs

Ch1

J

5V

17 Nov 1998  
14:03:36

Final CPT Para 3.3.5.4 Ch. B Amplitude

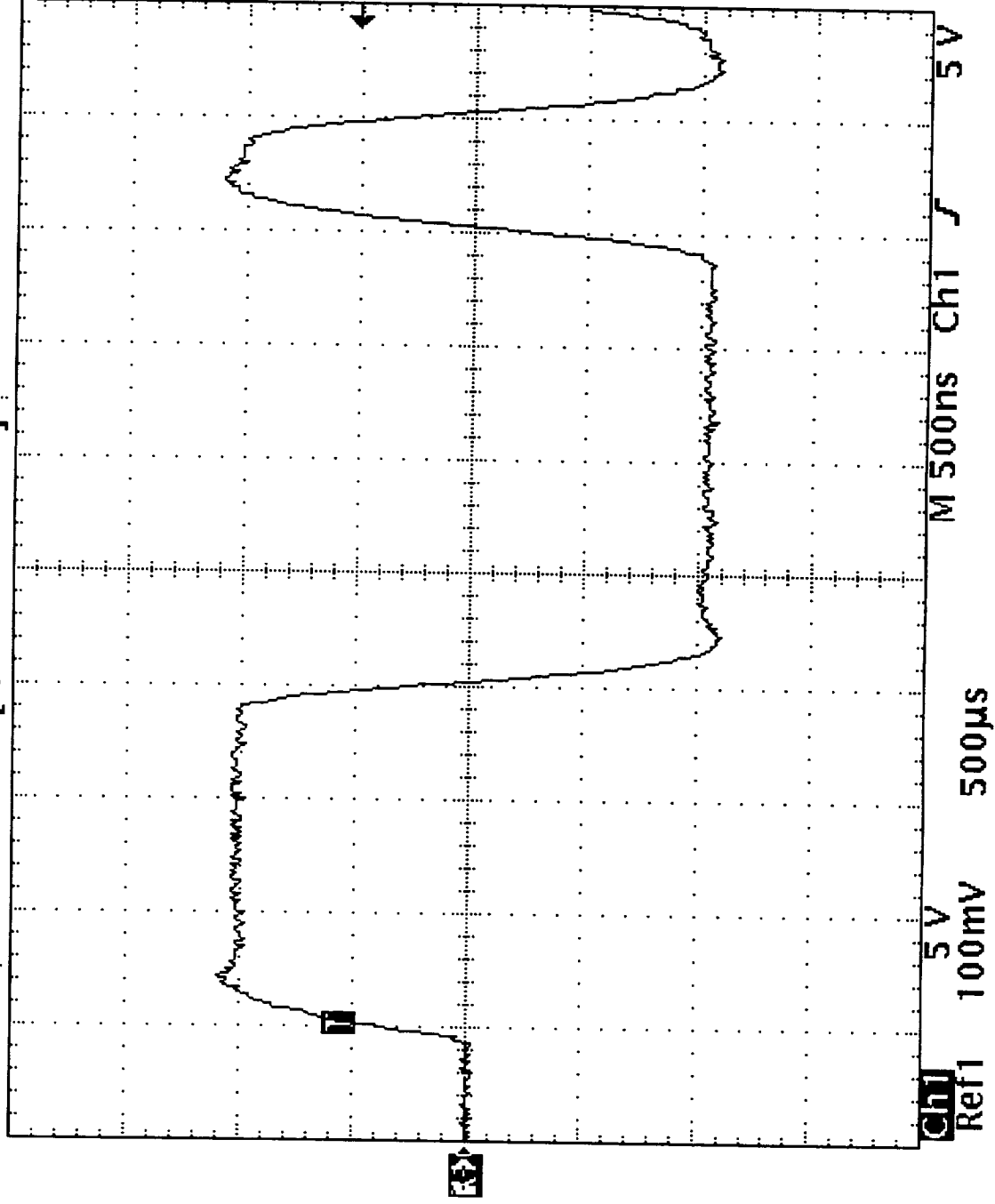
EOS A1 S/N202

TDS13

Tek Stop: 100MS/s

30 Acqs

[ T ]



17 Nov 1998  
14:01:52

Ok "B" <sup>0.02</sup> Amplitude  
Rise Time  
TDS 13

Final CRT Para 3.3.5.4  
EOS A1 5/11/2002

**TEST DATA SHEET NO. 15**  
Test Point Interface Test (8 Second Sync Pulse TP) (Paragraph 3.3.6.2 )

**8 SECOND SYNC PULSE TEST POINT**

Attach Photograph or Plot Here or to Back of TDS

**8 SECOND SYNC PULSE TEST POINT**

Step	Parameter	Measured	Required	(P)ass / (F)ail
2	Pulse Length	7.999 seconds	8 seconds +/- 10%	P

EOS/AMSU-A1 System P/N 1356008 Shop Order: 560863  
Circle Test: 1<sup>st</sup> CPT Final CPT Sub CPT \_\_\_\_\_

S/N: 202

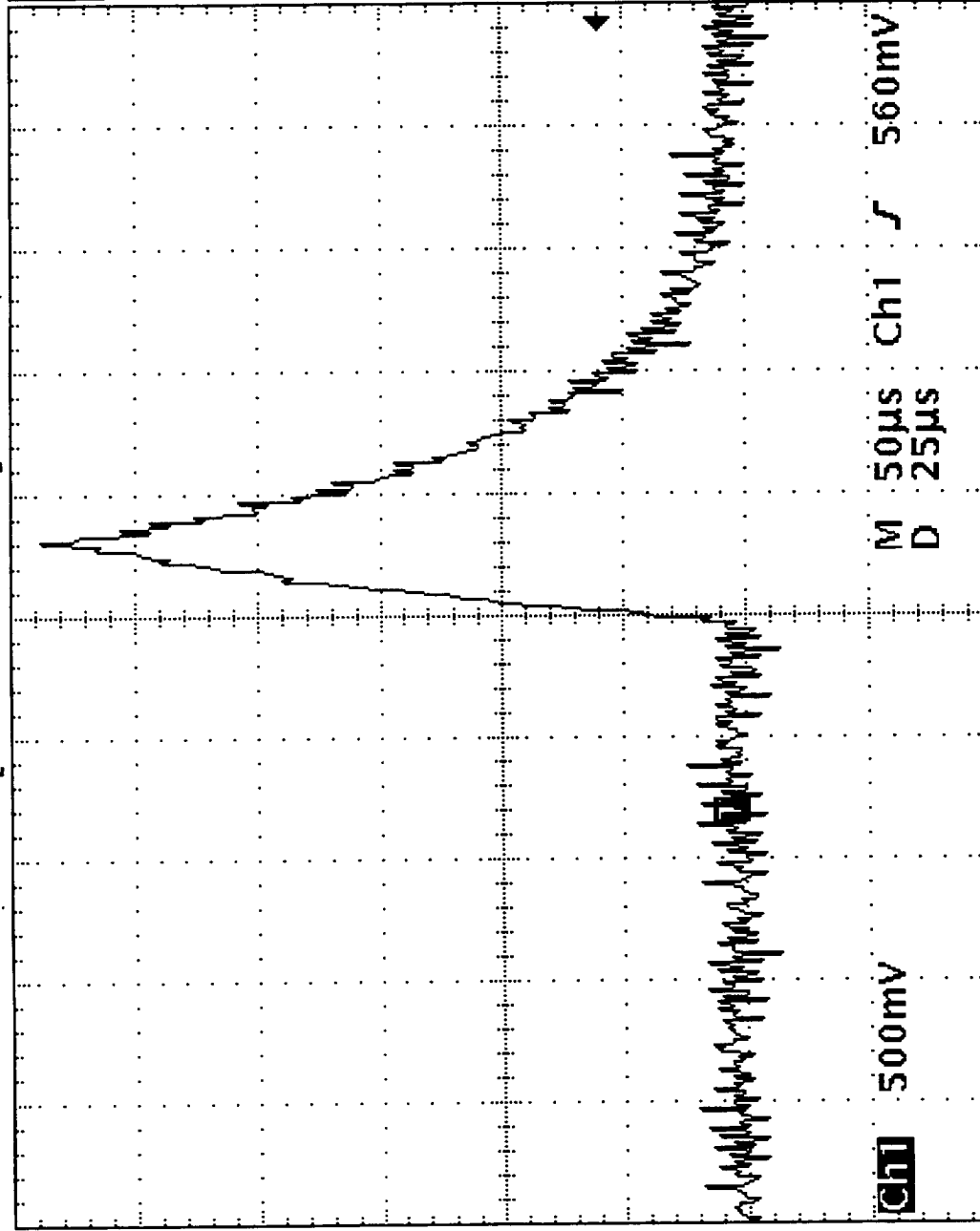
R. Hail 11/17/98  
Test Systems Engineer 200 Date  
Quality Control Date



**Tek Stop:** 2MS/s

1 Acqs

Delay Time: 8.000002 s



Time Base



Main Only



Intensified



Delayed Only

Delayed Ruins

8.000002 s

After Main

Set to Min

Ch1

500mV

M 50µs

D 25µs

Ch1

560mV

Time Base  
Delay Only

Trigger  
Position  
39%

Fit to  
Screen  
Off

8,000002s - 25µs = 7.999

P.3.3.6.2

P.3.3.6.2

TDS 15 11/17/28



**TEST DATA SHEET NO. 16**  
Test Point Interface Test (Integrate/Hold and Dump TPs) (Paragraph 3.3.6.3 )

**INTEGRATE/HOLD AND DUMP TEST POINTS**

Attach Photograph or Plot Here or to Back of TDS

**INTEGRATE/HOLD SIGNAL TEST POINT**

Step	Parameter	Measured	Required	(P)ass / (F)ail
4	Time Measured (A)*	milliseconds	165 ± 5 ms	165 P
4	Time Measured (B)*	milliseconds	32 -38 ms	37.5 P
4	Time Measurement (A+B)*	milliseconds	200 ± 5 ms	201 P

**DUMP SIGNAL TEST POINT**

Step	Parameter	Measured	Required	(P)ass / (F)ail
4	Time Measured (D)*	13 ms	9-15 ms	P

\* Refer to Figure 18 for Waveform Definition

EOS/AMSU-A1 System P/N 1356008  
Circle Test: 1<sup>st</sup> CPT Final CPT

Shop Order: 560863  
Sub CPT \_\_\_\_\_

S/N: 202

P. Hall  
Test Systems Engineer

11/17/98  
Date

Quality Control

Date

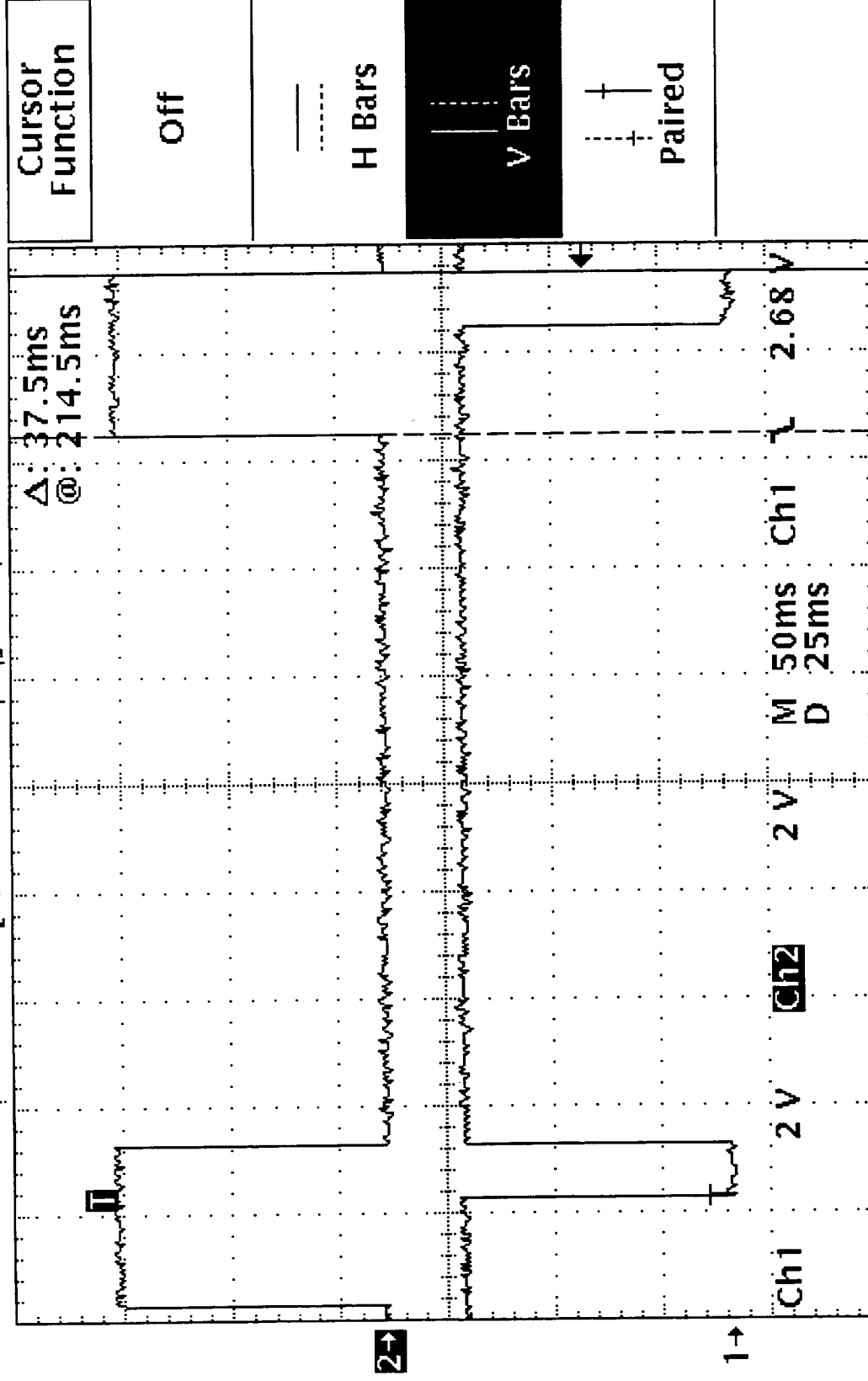




Tek Stop: 2kS/s

1 Acqs

[ T ]



Cursor Function

Off

H Bars

V Bars

Paired

Function V Bars

Time Units Seconds

P. 3.3.6.3

R. Heid

11/17/98

TD316



**TEST DATA SHEET NO. 17**

Test Point Interface Test (Radiometer Channel Analog Output TPs) (Paragraph 3.3.6.4 )

**RADIOMETER CHANNEL ANALOG OUTPUT TEST POINTS**

Attach Photographs or Plots Here or to Back of TDS

**RADIOMETER CHANNEL ANALOG OUTPUT TEST POINTS**

Channel	Integration Time Measured (E)*	Integration Time Required (ms)	Hold Time Measured (F)*	Hold Time Required (ms)	(P)ass / (F)ail
3	165 ms	165 ± 5 ms	25 ms	23-27	
4		165 ± 5 ms		23-27	
5		165 ± 5 ms		23-27	
6		165 ± 5 ms		23-27	
7		165 ± 5 ms		23-27	
8		165 ± 5 ms		23-27	
9		165 ± 5 ms		23-27	
10		165 ± 5 ms		23-27	
11		165 ± 5 ms		23-27	
12		165 ± 5 ms		23-27	
13		165 ± 5 ms		23-27	
14		165 ± 5 ms		23-27	
15		165 ± 5 ms		23-27	

\* Refer to Figure 18 for Waveform Definition

EOS/AMSU-A1 System P/N 1356008

Shop Order: 260863

S/N: 202

Circle Test: 1<sup>st</sup> CPT

Final CPT

Sub CPT \_\_\_\_\_

Test Systems Engineer

NOV 19 1998

Quality Control

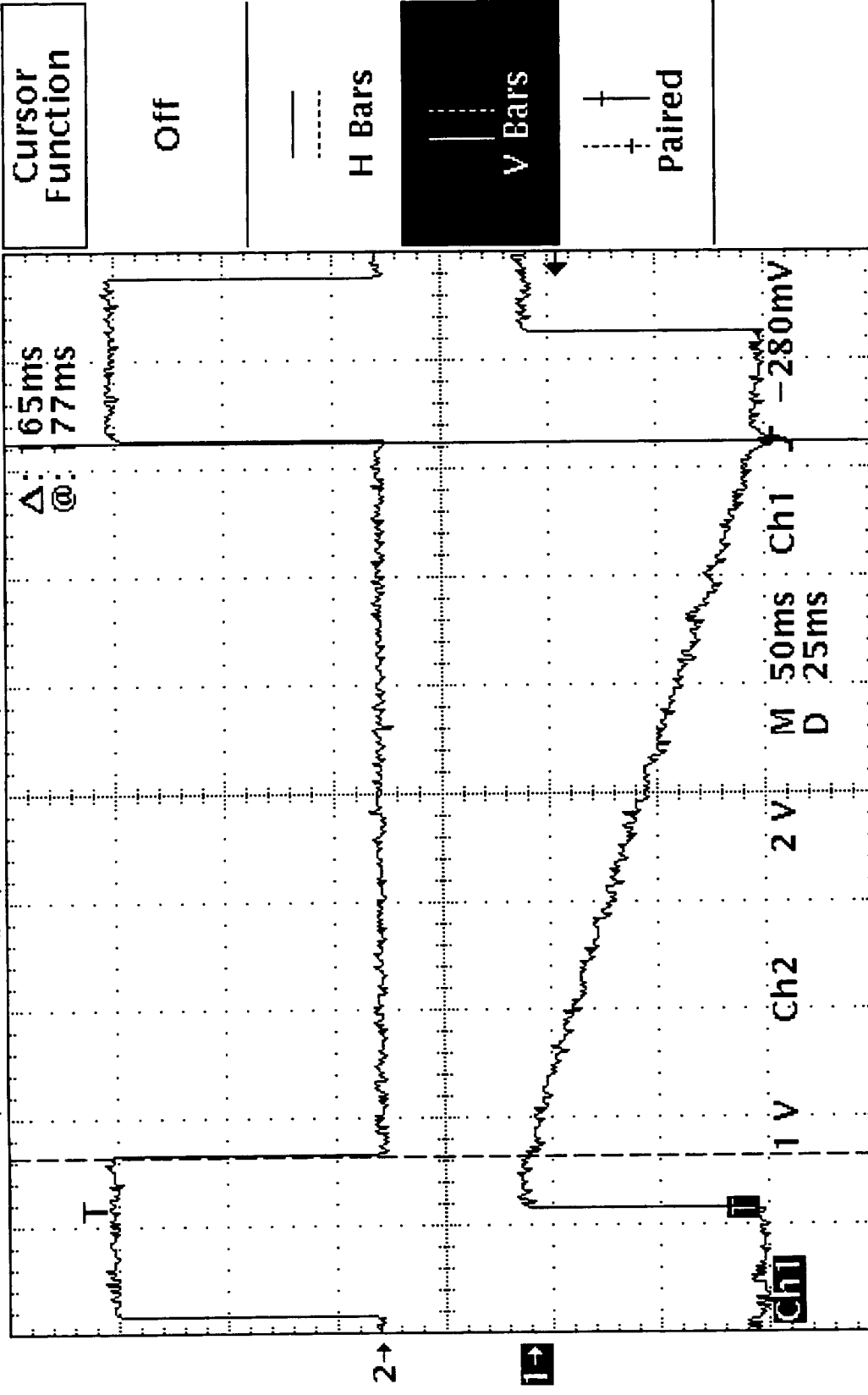
Date



Tek Stop: 2KS/s

9 Acqs

[ T ]



Cursor Function

Off

H Bars

V Bars

Paired

Function V Bars

Time Units seconds

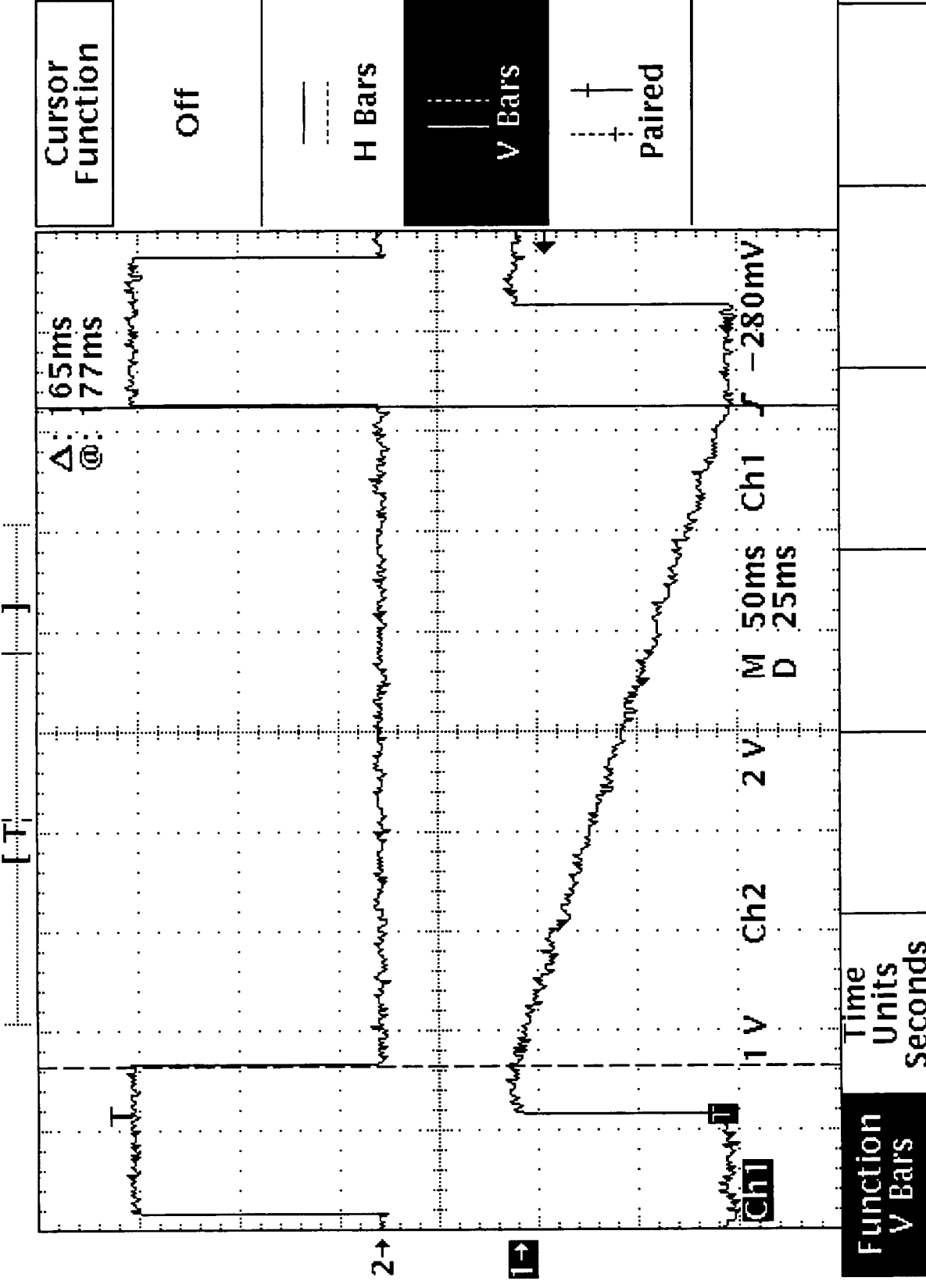
Ch. #3  
P. 3.3.6.4  
R. Hail  
11/17/98



**Tek Run: 2kS/s**      **Sample**      **Delay?**

## Sample

## Delay?



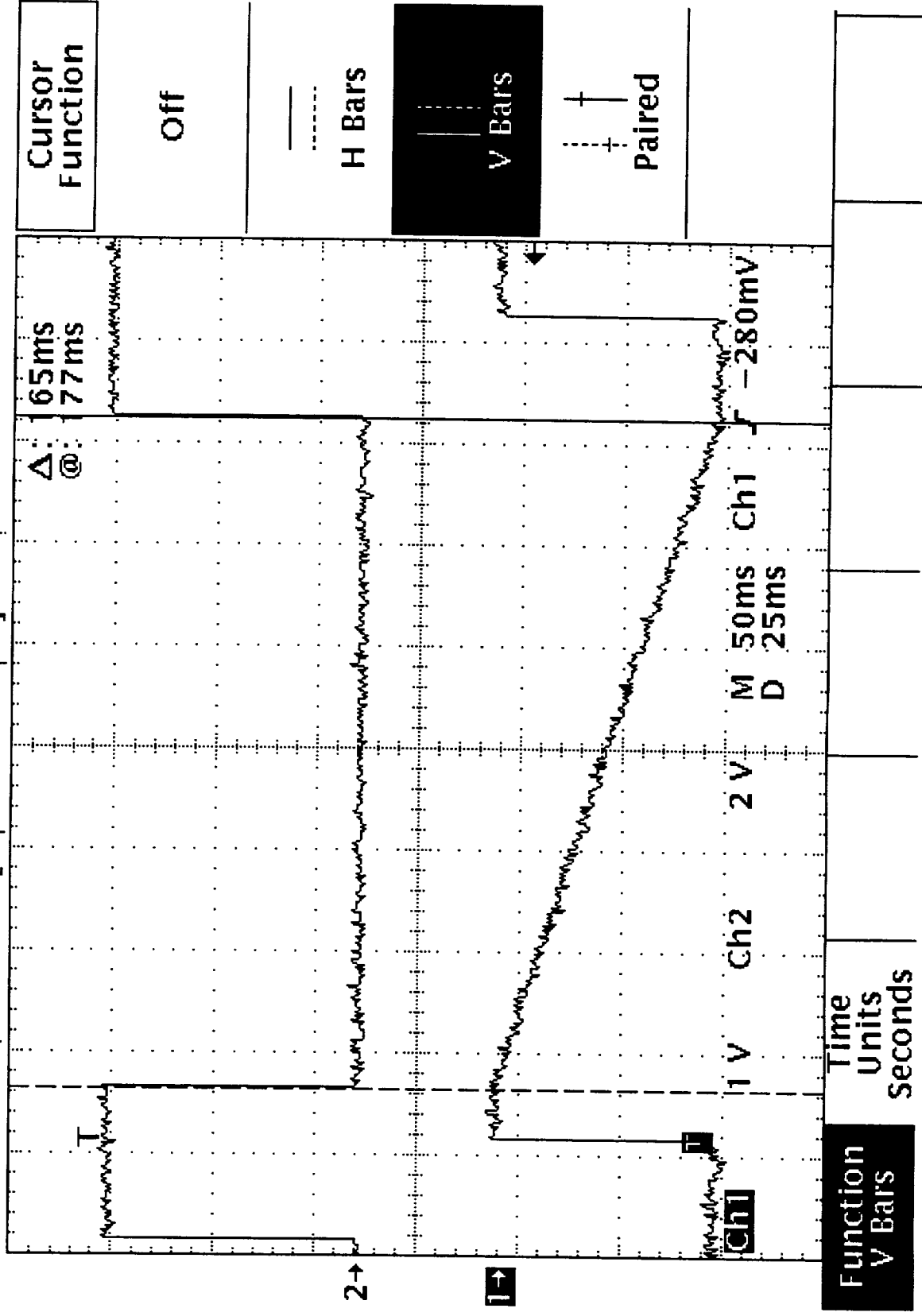
5#

P. 3. 36. 4  
K. Hart  
11/17/98

Tek Stop: 2kS/s

0 Acqs

[ T<sub>1</sub> ]



P.3.3.6.4 R. Bail  
11/17/98

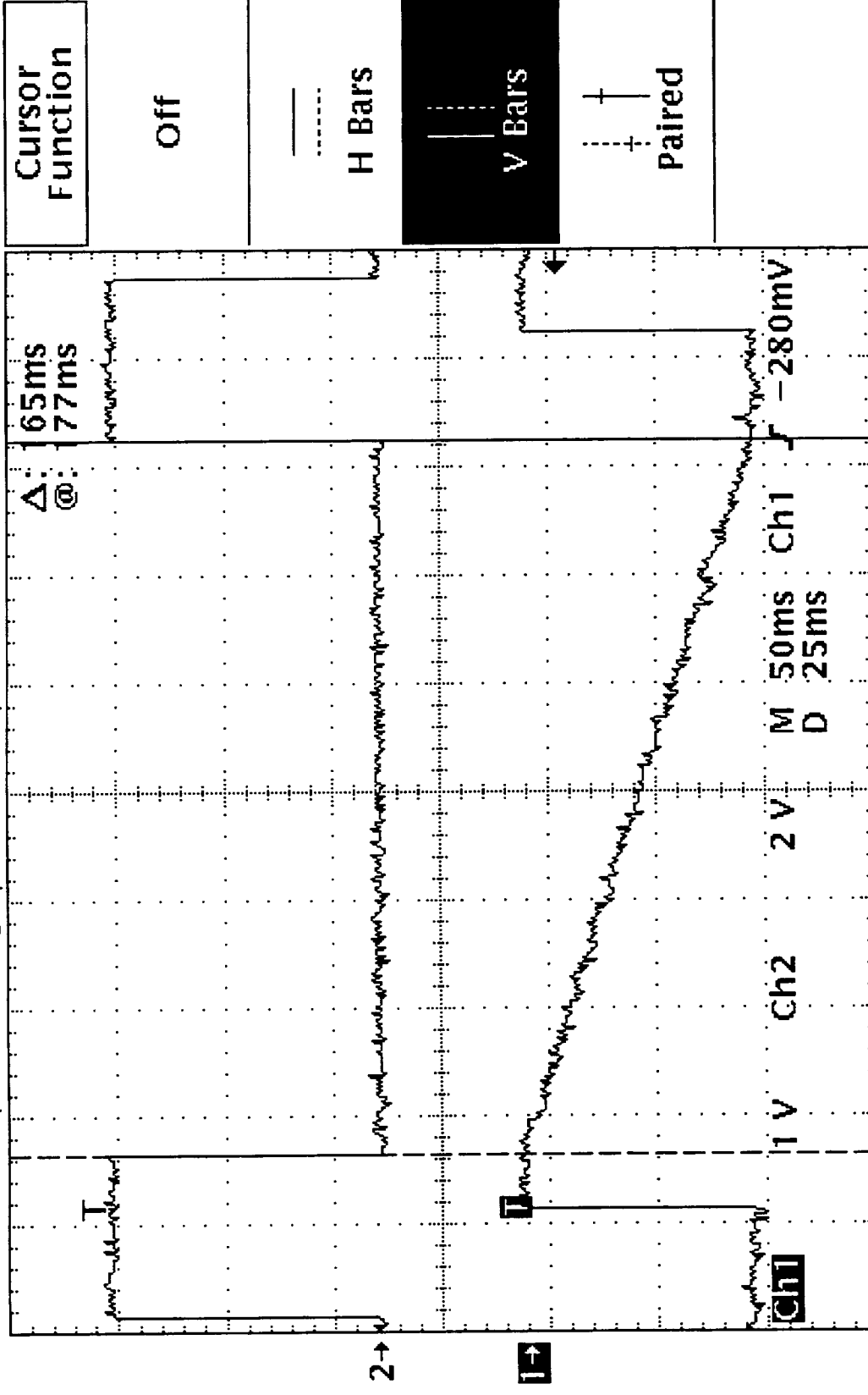
Ch. # 6



Tek Stop: 2KS/s

3 Acqs

[ T ]



Cursor  
Function

Off

H Bars

V Bars

Paired

Function  
V Bars

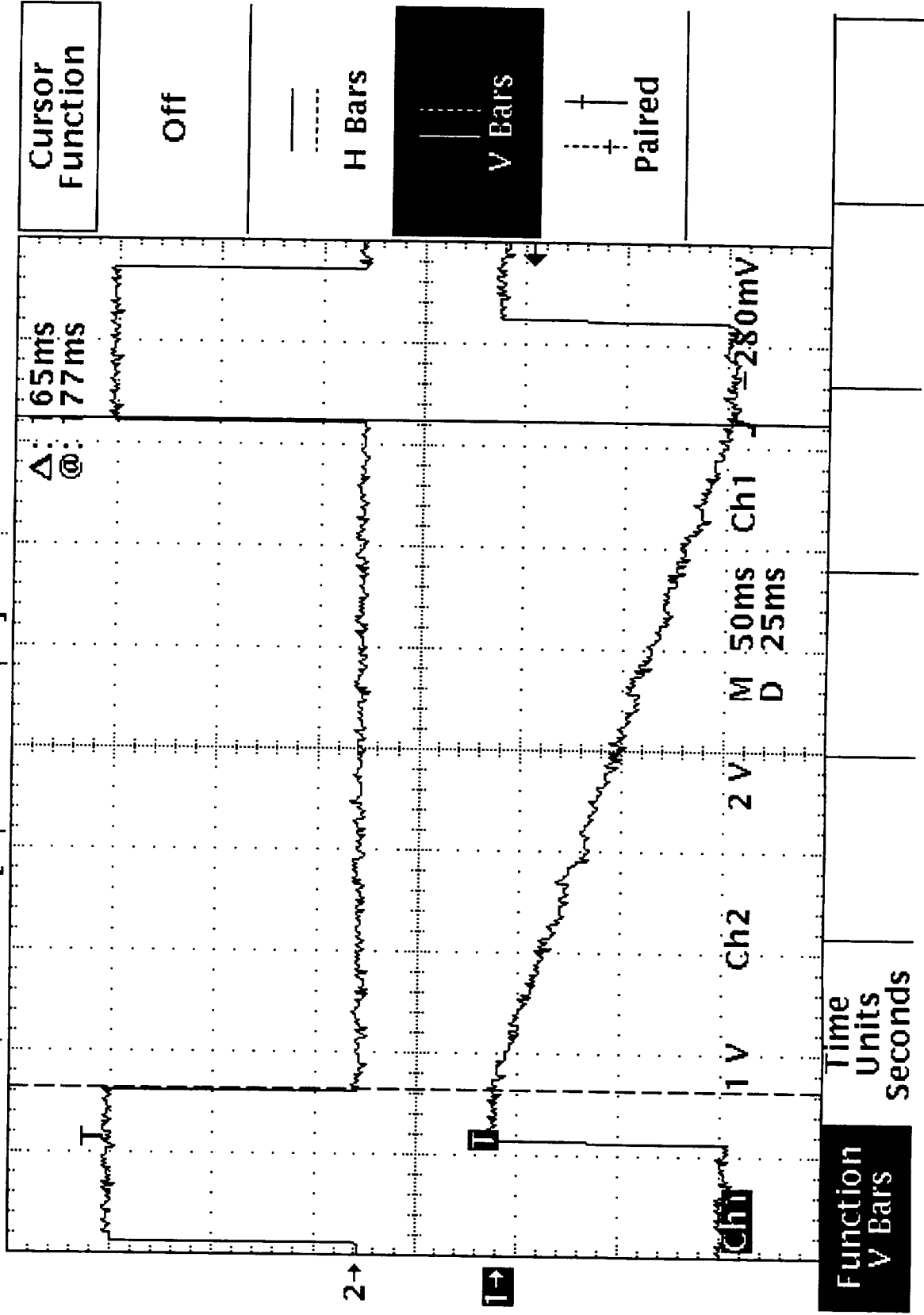
Time  
Units  
Seconds

Ch. # 7 P.3.3.6.4 R. J. J. 11/17/88

Tek Stop 2ks/s

1 Acqs

[ T ]



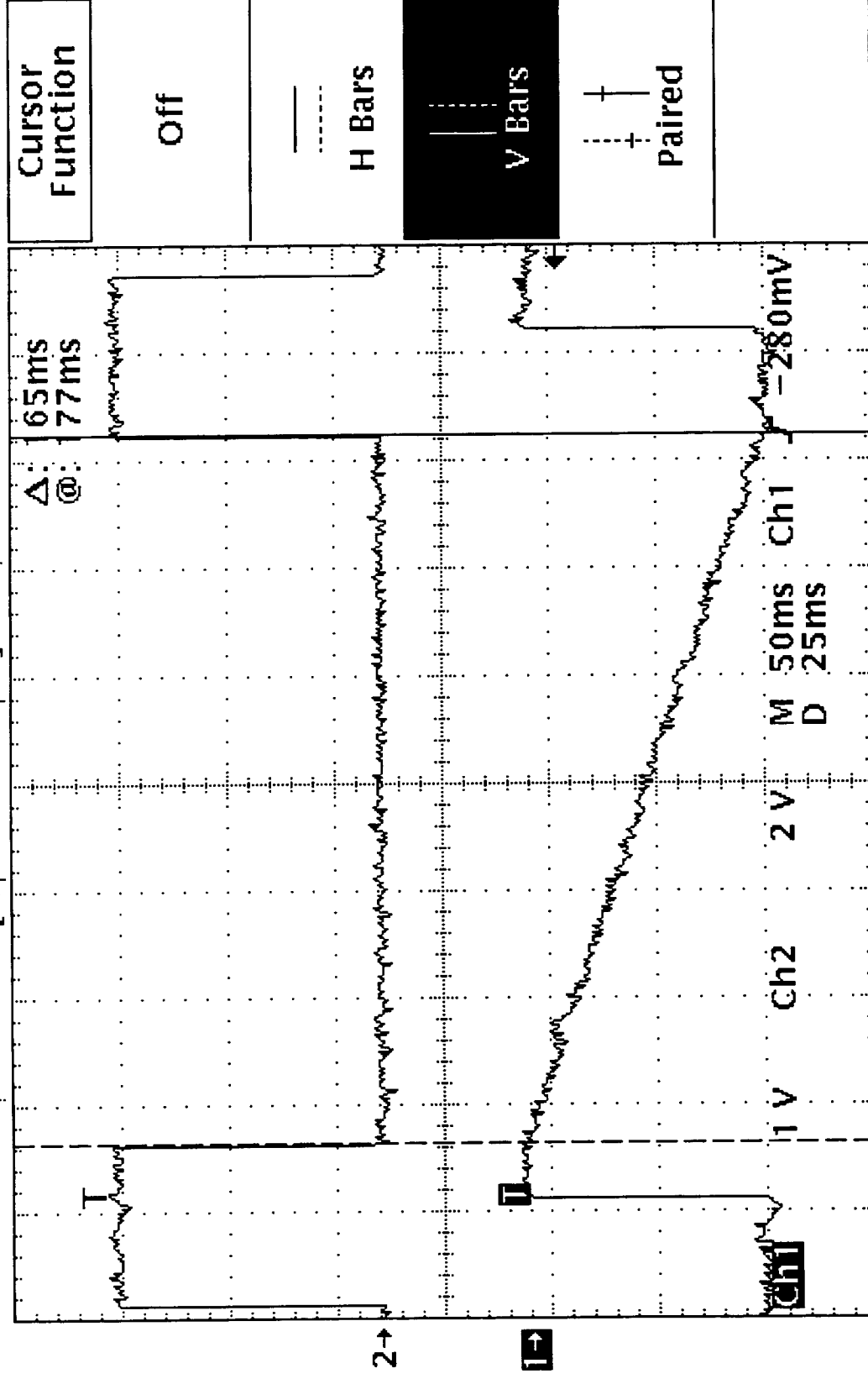
W. #8

P. 3.3.6.4 R. Khalil  
11/17/80

Tek Stop: 2ks/s

1 Acqs

[ T ]



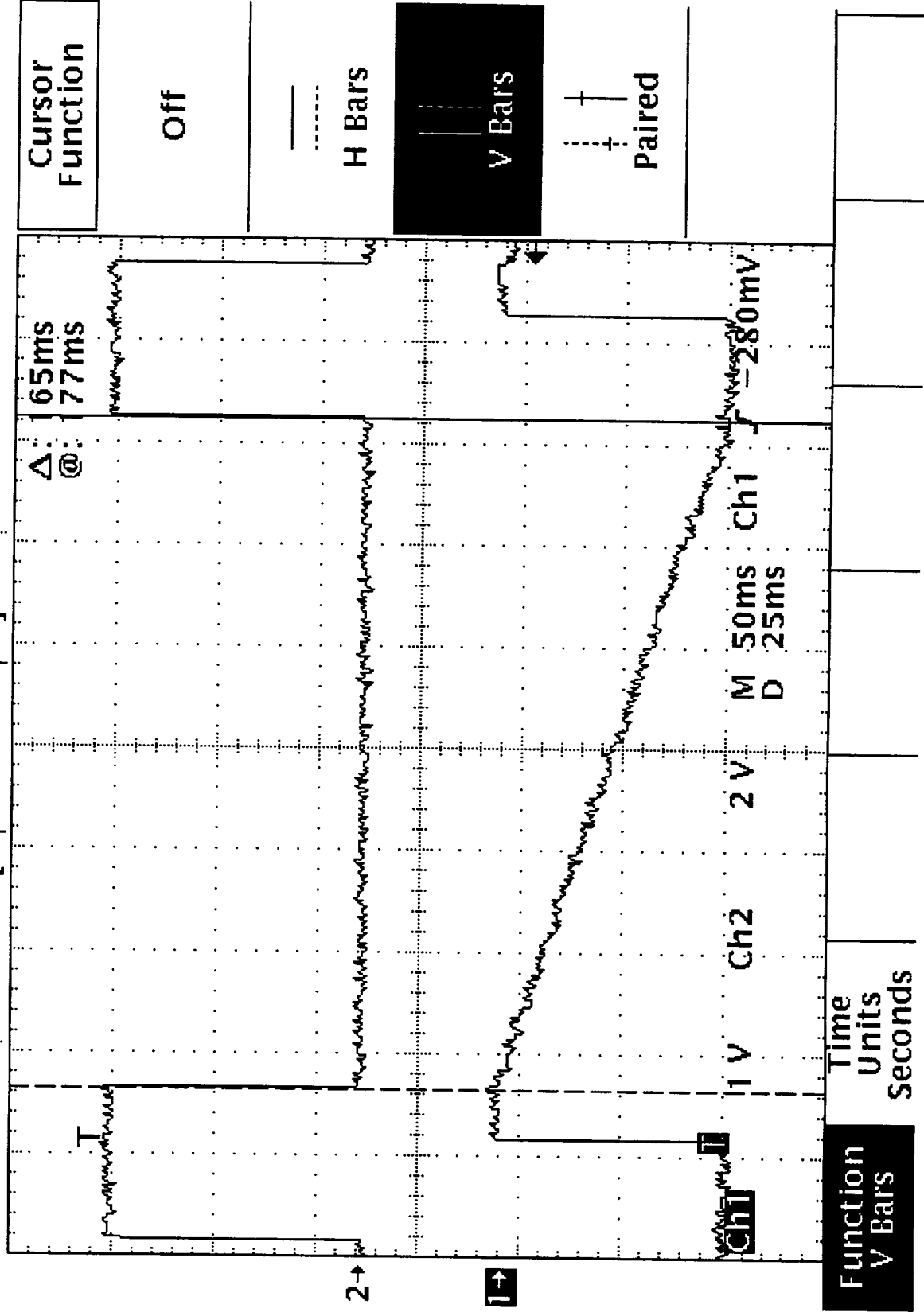
P.3.3.6.1 R. Hall  
11/1-198

Ch. 9

Tek Stop: 2ks/s

2 Acqs

[ T ]



Ch. # 10

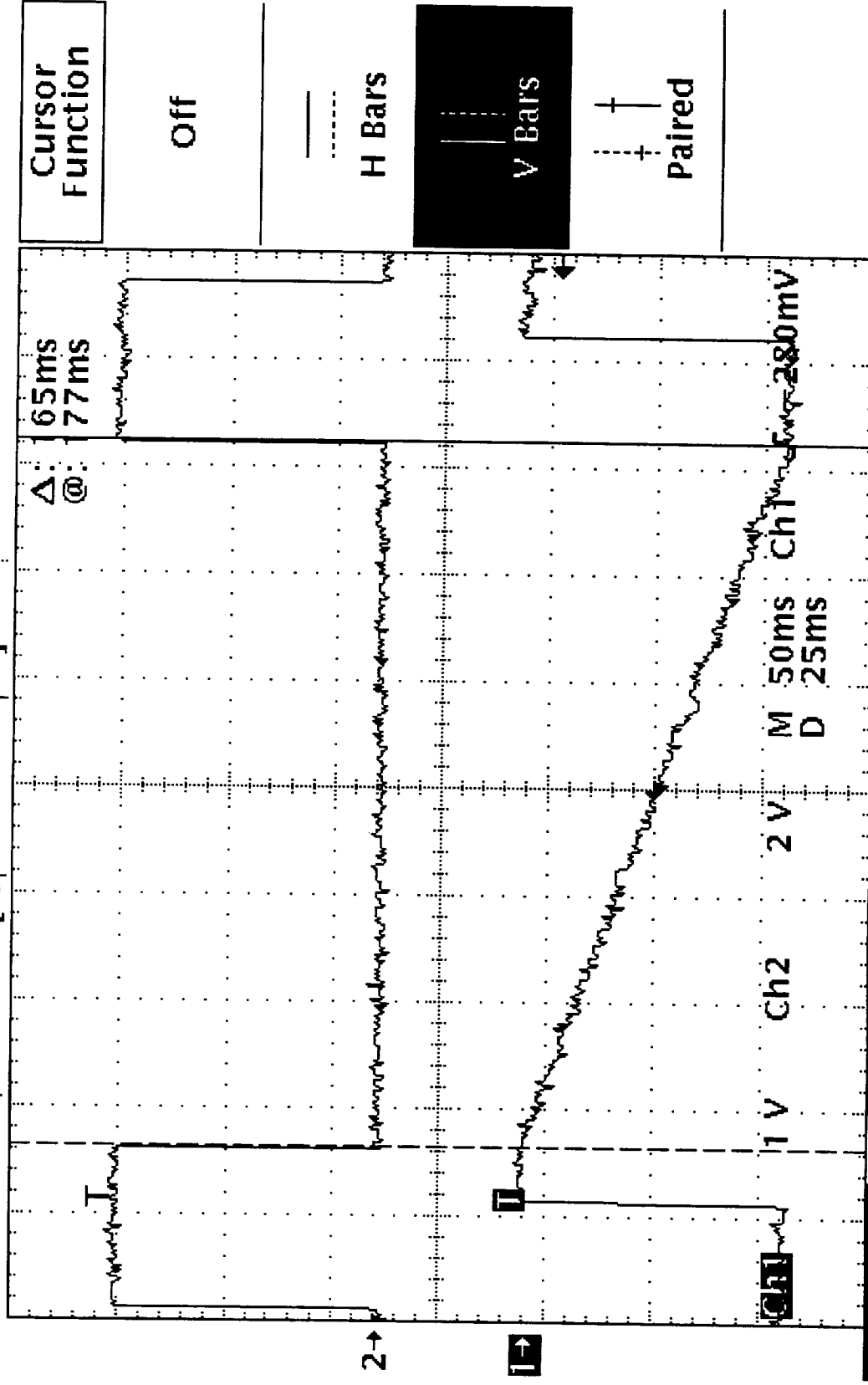
P. 3.3.6.4 R. H. 11/188



Tek Stop: 2KS/s

1 Acqs

[ T ]



Ch. #12

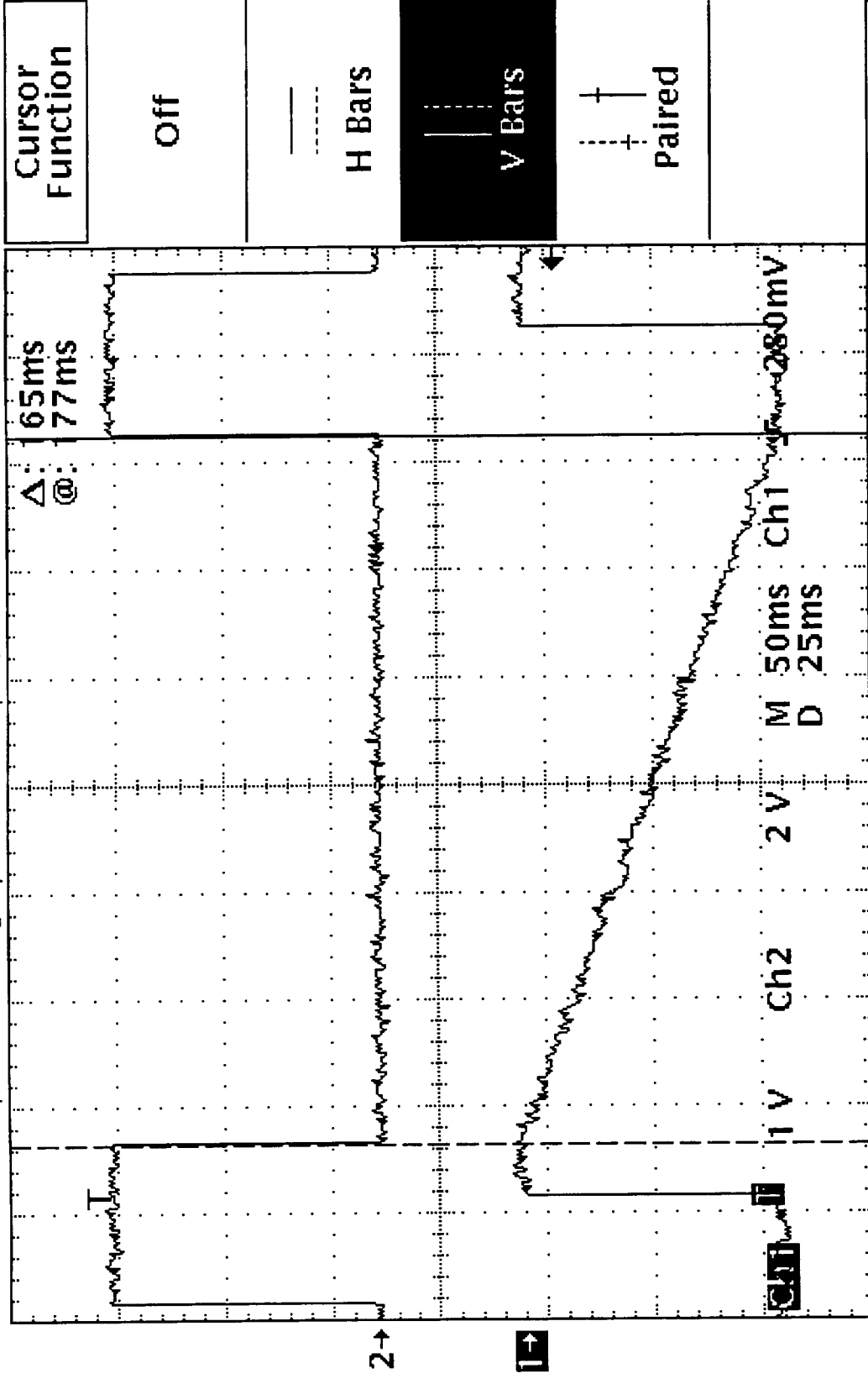
R.3.3.6.4

R. Hall  
1/17/98

Tek Stop: 2kS/s

3 Acqs

[ T ]



Cursor  
Function

Off

H Bars

V Bars

paired

Function  
V Bars

Time  
Units  
Seconds

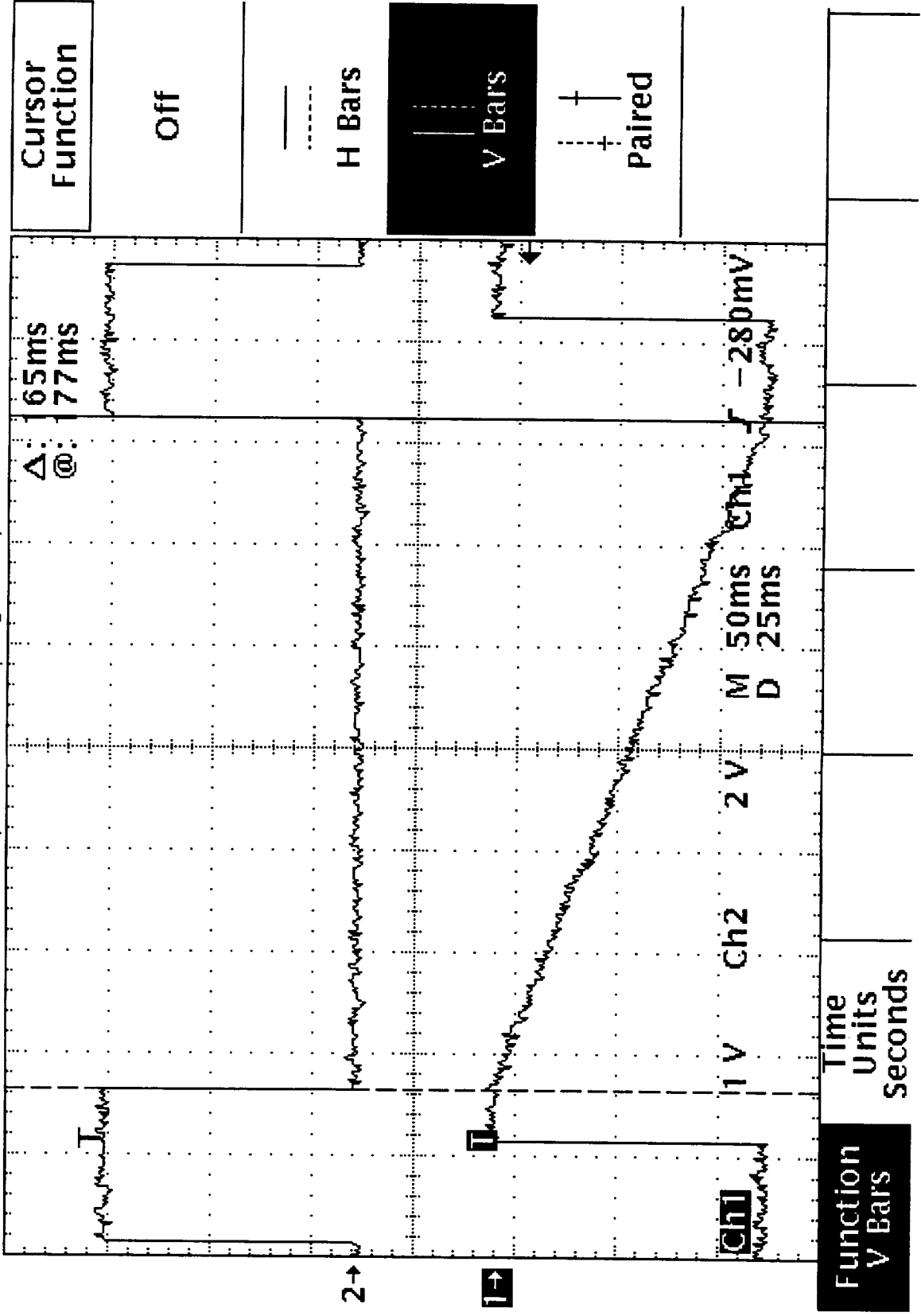
Ch. #13

P.3.3.6.4  
R. Hail  
11/17/88

Tek Stop: 2KS/s

5 Acqs

[ T<sub>1</sub> ]



Ch. # 14

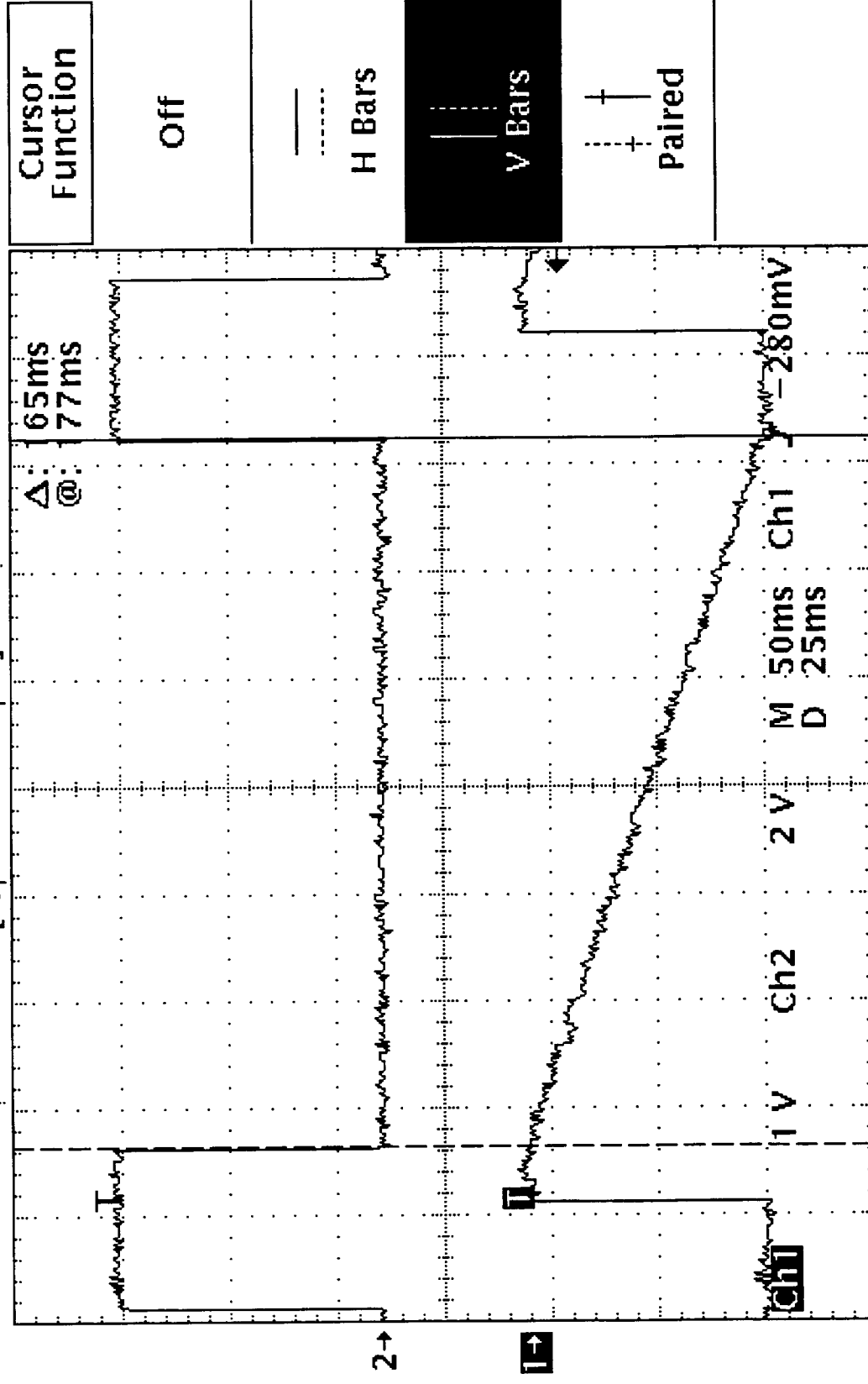
P. 3.3.6.4  
R. Hays  
11/2/18



Tek Stop 2ks/s

1 Acqs

[ T ]



Function  
V Bars

Time  
Units  
Seconds

Ch. # 15 P3.3.C.V R. Hall  
11/17/98



**TEST DATA SHEET NO. 18**  
Test Point Interface Test (PLO #1 and PLO #2 Lock TPs) (Paragraph 3.3.6.5)

PLO LOCK DETECT TEST POINTS				
Step	Parameter	Measured	Required	(P)ass / (F)ail
3	PLO #1 Lock Detect*	.012 volts	± 1.0 volt	P
6	PLO #2 Lock Detect**	.049 volts	± 1.0 volt	P

\* When PLO #1 is selected

\*\* When PLO #2 is selected

EOS/AMSU-A1 System P/N 1356008 Shop Order: 560863  
Circle Test: 1<sup>st</sup> CPT Final CPT Sub CPT \_\_\_\_\_

S/N: 202

R. Hill 11/17/98  
Test Systems Engineer Date  
300 NCV 19 1998  
Quality Control Date



**TEST DATA SHEET NO. 19**  
Test Point Interface Test (GSE Modes) (Paragraphs 3.3.6.6 - 3.3.6.11)

	GSE MODES					
	1	2	3	4	5	7
	MODE OBSERVED? (YES/NO)					
	Y	Y	Y	Y	Y	Y
	DATA REVIEWED? (YES/NO)					
Printout data	Y	Y	Y	Y	Y	Y
Packet ID						
Packet Length						
Unit Serial Number						
Instrument Mode/Status						
Reflector Positions						
Radiometer Scene Data						
PRT Temperature Data						
Engineering Data						

EOS/AMSU-A1 System P/N 1356008    Shop Order: 560863    SN: 202  
 Circle Test: 1<sup>st</sup> CPT    Final CPT

*R. Hail*    11/17/98  
 Test Systems Engineer (A)    Date  
 (200) NOV 19 1998  
 Quality Control    Date



[ 5 ] SCIENCE DATA ELEMENT 0000

[ 6 ] CONTROL/STATUS ELEMENT 00

[ 7 ] ENGINEERING ELEMENT 00

COMMANDS

PLLO POWER = PLLO#1 [ 15 ]

[ 9 ] SCANNER A1-1 POWER = ON

COLD CAL POSITION 1 =

YES [ 16 ]

[ 10 ] SCANNER A1-2 POWER = ON

2 =

NO [ 17 ]

[ 11 ] ANTENNA FULL SCAN MODE = NO

3 =

NO [ 18 ]

[ 12 ] WARM CAL = NO

COLD CAL POSITION 4 =

NO [ 19 ]

[ 13 ] COLD CAL = NO

RESET C&DH PROCESSOR

[ 20 ]

[ 14 ] NADIR = NO

GSE MODE

[ 21 ]

ENGR OK POWER ON CHECKSUM IN 36EB CALC 36EB SA28 307 SA29 565  
SCREEN ONLY [ 2 ] PRINT [ 3 ] FULL [ 1 ] RETURN

SELECT BUTTON 3

GSE MODE 7

R. Hail

11/17/98

P.3.3.6.6

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	GSE #7 SAMPLE 17 CH 8	16773
2		00000011	574	CH 9	16500
3	PACKET LENGTH	00000010	576	CH 10	16738
4		10111111	578	CH 11	18025
5	UNIT SERIAL NUMBER	00000011	580	CH 12	18219
6		11100000	582	CH 13	17981
7	INSTRUMENT MODE/STATUS	10011010	584	CH 14	20003
8		00000000	586	CH 15	16644
10	REFLECTOR 1 POSITION 1	15280	588	REFLECTOR 1 POSITION 18	15279
12	REFLECTOR 2 POSITION 1	14926	590	REFLECTOR 2 POSITION 18	14926
14	REFL 1 POS 1 2ND LOOK	15280	592	REFL 1 POS 18 2ND LOOK	15279
16	REFL 2 POS 1 2ND LOOK	14926	594	REFL 2 POS 18 2ND LOOK	14926
18	GSE #7 SAMPLE 1 CH 3	16045	596	GSE #7 SAMPLE 18 CH 3	16048
20	CH 4	16609	598	CH 4	16608
22	CH 5	15905	600	CH 5	15902
24	CH 6	17282	602	CH 6	17278
26	CH 7	15711	604	CH 7	15711
28	CH 8	16771	606	CH 8	16772
30	CH 9	16495	608	CH 9	16497
32	CH 10	16736	610	CH 10	16737
34	CH 11	18021	612	CH 11	18028
36	CH 12	18213	614	CH 12	18215
38	CH 13	17980	616	CH 13	17989
40	CH 14	19989	618	CH 14	19976
42	CH 15	16644	620	CH 15	16644
44	REFLECTOR 1 POSITION 2	15279	622	REFLECTOR 1 POSITION 19	15279
46	REFLECTOR 2 POSITION 2	14926	624	REFLECTOR 2 POSITION 19	14926
48	REFL 1 POS 2 2ND LOOK	15279	626	REFL 1 POS 19 2ND LOOK	15279
50	REFL 2 POS 2 2ND LOOK	14926	628	REFL 2 POS 19 2ND LOOK	14926
52	GSE #7 SAMPLE 2 CH 3	16048	630	GSE #7 SAMPLE 19 CH 3	16045
54	CH 4	16609	632	CH 4	16608
56	CH 5	15903	634	CH 5	15904
58	CH 6	17282	636	CH 6	17279
60	CH 7	15711	638	CH 7	15713
62	CH 8	16771	640	CH 8	16772
64	CH 9	16500	642	CH 9	16499
66	CH 10	16743	644	CH 10	16740
68	CH 11	18024	646	CH 11	18024
70	CH 12	18214	648	CH 12	18219
72	CH 13	18004	650	CH 13	17980
74	CH 14	19955	652	CH 14	19982
76	CH 15	16645	654	CH 15	16643
78	REFLECTOR 1 POSITION 3	15279	656	REFLECTOR 1 POSITION 20	15279
80	REFLECTOR 2 POSITION 3	14926	658	REFLECTOR 2 POSITION 20	14926
82	REFL 1 POS 3 2ND LOOK	15279	660	REFL 1 POS 20 2ND LOOK	15279
84	REFL 2 POS 3 2ND LOOK	14926	662	REFL 2 POS 20 2ND LOOK	14926
86	GSE #7 SAMPLE 3 CH 3	16051	664	GSE #7 SAMPLE 20 CH 3	16050
88	CH 4	16613	666	CH 4	16612
90	CH 5	15904	668	CH 5	15905
92	CH 6	17280	670	CH 6	17279



ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15713	672	CH 7	15713
96	CH 8	16772	674	CH 8	16771
98	CH 9	16498	676	CH 9	16500
100	CH 10	16743	678	CH 10	16738
102	CH 11	18024	680	CH 11	18021
104	CH 12	18214	682	CH 12	18216
106	CH 13	17982	684	CH 13	17979
108	CH 14	19998	686	CH 14	19988
110	CH 15	16646	688	CH 15	16642
112	REFLECTOR 1 POSITION 4	15280	690	REFLECTOR 1 POSITION 21	15279
114	REFLECTOR 2 POSITION 4	14926	692	REFLECTOR 2 POSITION 21	14926
116	REFL 1 POS 4 2ND LOOK	15280	694	REFL 1 POS 21 2ND LOOK	15279
118	REFL 2 POS 4 2ND LOOK	14926	696	REFL 2 POS 21 2ND LOOK	14926
120	GSE #7 SAMPLE 4	16050	698	GSE #7 SAMPLE 21	16051
122	CH 3	16610	700	CH 3	16607
124	CH 4	15905	702	CH 4	15904
126	CH 5	17281	704	CH 5	17277
128	CH 6	15714	706	CH 6	15711
130	CH 7	16770	708	CH 7	16773
132	CH 8	16496	710	CH 8	16495
134	CH 9	16740	712	CH 9	16743
136	CH 10	18030	714	CH 10	18017
138	CH 11	18212	716	CH 11	18223
140	CH 12	17990	718	CH 12	17985
142	CH 13	19992	720	CH 13	19991
144	CH 14	16646	722	CH 14	16645
146	CH 15	15280	724	CH 15	15280
148	REFLECTOR 1 POSITION 5	14926	726	REFLECTOR 1 POSITION 22	14926
150	REFLECTOR 2 POSITION 5	14926	728	REFLECTOR 2 POSITION 22	14926
152	REFL 1 POS 5 2ND LOOK	15280	730	REFL 1 POS 22 2ND LOOK	15280
154	REFL 2 POS 5 2ND LOOK	14926	732	REFL 2 POS 22 2ND LOOK	14926
156	GSE #7 SAMPLE 5	16051	734	GSE #7 SAMPLE 22	16045
158	CH 3	16612	736	CH 3	16610
160	CH 4	15904	738	CH 4	15904
162	CH 5	17280	740	CH 5	17278
164	CH 6	15710	742	CH 6	15712
166	CH 7	16772	744	CH 7	16770
168	CH 8	16496	746	CH 8	16500
170	CH 9	16740	748	CH 9	16742
172	CH 10	18030	750	CH 10	18022
174	CH 11	18212	752	CH 11	18227
176	CH 12	17990	754	CH 12	17986
178	CH 13	20002	756	CH 13	20009
180	CH 14	16644	758	CH 14	16645
182	CH 15	15280	760	CH 15	15280
184	REFLECTOR 1 POSITION 6	14926	762	REFLECTOR 1 POSITION 23	14926
186	REFLECTOR 2 POSITION 6	14926	764	REFLECTOR 2 POSITION 23	14926
188	REFL 1 POS 6 2ND LOOK	15280	766	REFL 1 POS 23 2ND LOOK	15280
190	REFL 2 POS 6 2ND LOOK	14926	768	REFL 2 POS 23 2ND LOOK	14926
192	GSE #7 SAMPLE 6	16045	770	GSE #7 SAMPLE 23	16046
	CH 3	16609		CH 3	16608
	CH 4	15905		CH 4	15904
	CH 5			CH 5	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17282	772	CH 6	17281
196	CH 7	15715	774	CH 7	15711
198	CH 8	16772	776	CH 8	16774
200	CH 9	16497	778	CH 9	16498
202	CH 10	16737	780	CH 10	16737
204	CH 11	18021	782	CH 11	18022
206	CH 12	18220	784	CH 12	18225
208	CH 13	17989	786	CH 13	17978
210	CH 14	19981	788	CH 14	20015
212	CH 15	16644	790	CH 15	16646
214	REFLECTOR 1 POSITION 7	15280	792	REFLECTOR 1 POSITION 24	15280
216	REFLECTOR 2 POSITION 7	14926	794	REFLECTOR 2 POSITION 24	14926
218	REFL 1 POS 7 2ND LOOK	15280	796	REFL 1 POS 24 2ND LOOK	15280
220	REFL 2 POS 7 2ND LOOK	14926	798	REFL 2 POS 24 2ND LOOK	14926
222	GSE #7 SAMPLE 7	16050	800	GSE #7 SAMPLE 24	16050
224	CH 3	16610	802	CH 3	16608
226	CH 4	15902	804	CH 4	15903
228	CH 5	17280	806	CH 5	17283
230	CH 6	15710	808	CH 6	15713
232	CH 7	16771	810	CH 7	16768
234	CH 8	16499	812	CH 8	16501
236	CH 9	16733	814	CH 9	16731
238	CH 10	18033	816	CH 10	18023
240	CH 11	18214	818	CH 11	18224
242	CH 12	17975	820	CH 12	17982
244	CH 13	19989	822	CH 13	19979
246	CH 14	16644	824	CH 14	16644
248	CH 15	15280	826	CH 15	15280
250	REFLECTOR 1 POSITION 8	14926	828	REFLECTOR 1 POSITION 25	14926
252	REFLECTOR 2 POSITION 8	15280	830	REFLECTOR 2 POSITION 25	15280
254	REFL 1 POS 8 2ND LOOK	14926	832	REFL 1 POS 25 2ND LOOK	14926
256	REFL 2 POS 8 2ND LOOK	16049	834	REFL 2 POS 25 2ND LOOK	16045
258	GSE #7 SAMPLE 8	16610	836	GSE #7 SAMPLE 25	16607
260	CH 3	15903	838	CH 3	15904
262	CH 4	17280	840	CH 4	17279
264	CH 5	15713	842	CH 5	15712
266	CH 6	16771	844	CH 6	16768
268	CH 7	16497	846	CH 7	16501
270	CH 8	16737	848	CH 8	16501
272	CH 9	18024	850	CH 9	18023
274	CH 10	18213	852	CH 10	18210
276	CH 11	17991	854	CH 11	17992
278	CH 12	19993	856	CH 12	20003
280	CH 13	16646	858	CH 13	16645
282	CH 14	15280	860	CH 14	15280
284	CH 15	14926	862	CH 15	14926
286	REFLECTOR 1 POSITION 9	15280	864	REFLECTOR 1 POSITION 26	15280
288	REFLECTOR 2 POSITION 9	14926	866	REFLECTOR 2 POSITION 26	14926
290	REFL 1 POS 9 2ND LOOK	16053	868	REFL 1 POS 26 2ND LOOK	16049
292	REFL 2 POS 9 2ND LOOK	16608	870	REFL 2 POS 26 2ND LOOK	16609
	GSE #7 SAMPLE 9			GSE #7 SAMPLE 26	
	CH 3			CH 3	
	CH 4			CH 4	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15904	872	CH 5	15906
296	CH 6	17279	874	CH 6	17283
298	CH 7	15714	876	CH 7	15713
300	CH 8	16775	878	CH 8	16773
302	CH 9	16497	880	CH 9	16497
304	CH 10	16738	882	CH 10	16731
306	CH 11	18023	884	CH 11	18029
308	CH 12	18214	886	CH 12	18217
310	CH 13	17988	888	CH 13	17976
312	CH 14	19989	890	CH 14	19993
314	CH 15	16644	892	CH 15	16644
316	REFLECTOR 1 POSITION 10	15279	894	REFLECTOR 1 POSITION 27	15280
318	REFLECTOR 2 POSITION 10	14926	896	REFLECTOR 2 POSITION 27	14926
320	REFL 1 POS 10 2ND LOOK	15279	898	REFL 1 POS 27 2ND LOOK	15280
322	REFL 2 POS 10 2ND LOOK	14926	900	REFL 2 POS 27 2ND LOOK	14926
324	GSE #7 SAMPLE 10	16047	902	GSE #7 SAMPLE 27	16044
326	CH 3	16610	904	CH 3	16611
328	CH 4	15907	906	CH 4	15901
330	CH 5	17281	908	CH 5	17285
332	CH 6	15712	910	CH 6	15712
334	CH 7	16773	912	CH 7	16773
336	CH 8	16498	914	CH 8	16498
338	CH 9	16737	916	CH 9	16738
340	CH 10	18029	918	CH 10	18026
342	CH 11	18227	920	CH 11	18222
344	CH 12	17988	922	CH 12	17988
346	CH 13	20004	924	CH 13	19979
348	CH 14	16643	926	CH 14	16644
350	CH 15	15279	928	CH 15	15280
352	REFLECTOR 1 POSITION 11	15279	930	REFLECTOR 1 POSITION 28	15280
354	REFLECTOR 2 POSITION 11	14926	932	REFLECTOR 2 POSITION 28	14926
356	REFL 1 POS 11 2ND LOOK	15279	934	REFL 1 POS 28 2ND LOOK	15280
358	REFL 2 POS 11 2ND LOOK	14926	936	REFL 2 POS 28 2ND LOOK	14926
360	GSE #7 SAMPLE 11	16047	938	GSE #7 SAMPLE 28	16047
362	CH 3	16609	940	CH 3	16608
364	CH 4	15906	942	CH 4	15901
366	CH 5	17280	944	CH 5	17280
368	CH 6	15708	946	CH 6	15710
370	CH 7	16773	948	CH 7	16771
372	CH 8	16499	950	CH 8	16497
374	CH 9	16740	952	CH 9	16738
376	CH 10	18019	954	CH 10	18020
378	CH 11	18221	956	CH 11	18217
380	CH 12	17994	958	CH 12	17986
382	CH 13	19958	960	CH 13	19958
384	CH 14	16645	962	CH 14	16645
386	CH 15	15280	964	CH 15	15279
388	REFLECTOR 1 POSITION 12	14926	966	REFLECTOR 1 POSITION 29	14926
390	REFLECTOR 2 POSITION 12	14926	968	REFLECTOR 2 POSITION 29	14926
392	REFL 1 POS 12 2ND LOOK	15280	970	REFL 1 POS 29 2ND LOOK	15279
	REFL 2 POS 12 2ND LOOK	14926		REFL 2 POS 29 2ND LOOK	14926
	GSE #7 SAMPLE 12	16050		GSE #7 SAMPLE 29	16050

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16613	972	CH 4	16610
396	CH 5	15909	974	CH 5	15901
398	CH 6	17280	976	CH 6	17281
400	CH 7	15713	978	CH 7	15713
402	CH 8	16770	980	CH 8	16769
404	CH 9	16496	982	CH 9	16499
406	CH 10	16741	984	CH 10	16737
408	CH 11	18029	986	CH 11	18030
410	CH 12	18214	988	CH 12	18221
412	CH 13	17976	990	CH 13	17978
414	CH 14	19985	992	CH 14	19998
416	CH 15	16643	994	CH 15	16644
418	REFLECTOR 1 POSITION 13	15280	996	REFLECTOR 1 POSITION 30	15279
420	REFLECTOR 2 POSITION 13	14926	998	REFLECTOR 2 POSITION 30	14926
422	REFL 1 POS 13 2ND LOOK	15280	1000	REFL 1 POS 30 2ND LOOK	15279
424	REFL 2 POS 13 2ND LOOK	14926	1002	REFL 2 POS 30 2ND LOOK	14926
426	GSE #7 SAMPLE 13	16045	1004	GSE #7 SAMPLE 30	16049
428	CH 3	16608	1006	CH 3	16607
430	CH 4	15903	1008	CH 4	15901
432	CH 5	17281	1010	CH 5	17279
434	CH 6	15716	1012	CH 6	15711
436	CH 7	16770	1014	CH 7	16774
438	CH 8	16496	1016	CH 8	16497
440	CH 9	16742	1018	CH 9	16739
442	CH 10	18026	1020	CH 10	18024
444	CH 11	18221	1022	CH 11	18228
446	CH 12	17995	1024	CH 12	17991
448	CH 13	19991	1026	CH 13	19992
450	CH 14	16643	1028	CH 14	16645
452	CH 15	15280	1030	CH 15	OE
454	REFLECTOR 1 POSITION 14	14926	1032	REFLECTOR 1 COLD CAL POS	OE
456	REFLECTOR 2 POSITION 14	15280	1034	REFLECTOR 2 COLD CAL POS	OE
458	REFL 1 POS 14 2ND LOOK	14926	1036	REFL 1 COLD CAL 2ND LOOK	OE
460	REFL 2 POS 14 2ND LOOK	16047	1038	REFL 2 COLD CAL 2ND LOOK	0
462	GSE #7 SAMPLE 14	16610	1040	COLD CAL DATA 1	0
464	CH 3	15902	1042	CH 3	0
466	CH 4	17280	1044	CH 4	0
468	CH 5	15712	1046	CH 5	0
470	CH 6	16768	1048	CH 6	0
472	CH 7	16494	1050	CH 7	0
474	CH 8	16734	1052	CH 8	0
476	CH 9	18021	1054	CH 9	0
478	CH 10	18222	1056	CH 10	0
480	CH 11	17993	1058	CH 11	0
482	CH 12	19996	1060	CH 12	0
484	CH 13	16646	1062	CH 13	0
486	CH 14	15280	1064	CH 14	0
488	CH 15	14926	1066	CH 15	0
490	REFLECTOR 1 POSITION 15	15280	1068	REFLECTOR 1 COLD CAL DATA 2	0
492	REFLECTOR 2 POSITION 15	14926	1070	REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK			REFL 1 COLD CAL DATA 2	0
	REFL 2 POS 15 2ND LOOK			REFL 2 COLD CAL DATA 2	0

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	GSE #7 SAMPLE 15	16047	1072		0
496	CH 3	16609	1074	CH 7	0
498	CH 4	15905	1076	CH 8	0
500	CH 5	17280	1078	CH 9	0
502	CH 6	15713	1080	CH 10	0
504	CH 7	16771	1082	CH 11	0
506	CH 8	16496	1084	CH 12	0
508	CH 9	16737	1086	CH 13	0
510	CH 10	18022	1088	CH 14	0
512	CH 11	18219	1182	CH 15	0
514	CH 12	17988	1184	REFLECTOR 1 WARM CAL POS	0E
516	CH 13	19982	1186	REFLECTOR 2 WARM CAL POS	0E
518	CH 14	16643	1188	REFL 1 WARM CAL 2ND LOOK	0E
520	CH 15	15280	1190	REFL 2 WARM CAL 2ND LOOK	0E
522	REFLECTOR 1 POSITION 16	14926	1192	WARM CAL DATA 1	0
524	REFLECTOR 2 POSITION 16	15280	1194	CH 3	0
526	REFL 1 POS 16 2ND LOOK	14926	1196	CH 4	0
528	REFL 2 POS 16 2ND LOOK	16049	1198	CH 5	0
530	GSE #7 SAMPLE 16	16611	1200	CH 6	0
532	CH 3	15903	1202	CH 7	0
534	CH 4	17282	1204	CH 8	0
536	CH 5	15709	1206	CH 9	0
538	CH 6	16769	1208	CH 10	0
540	CH 7	16495	1210	CH 11	0
542	CH 8	16735	1212	CH 12	0
544	CH 9	18023	1214	CH 13	0
546	CH 10	18220	1216	CH 14	0
548	CH 11	17981	1218	CH 15	0
550	CH 12	19999	1220	CH 3	0
552	CH 13	16644	1222	CH 4	0
554	CH 14	15280	1224	CH 5	0
556	CH 15	14926	1226	CH 6	0
558	REFLECTOR 1 POSITION 17	15280	1228	CH 7	0
560	REFLECTOR 2 POSITION 17	14926	1230	CH 8	0
562	REFL 1 POS 17 2ND LOOK	16047	1232	CH 9	0
564	REFL 2 POS 17 2ND LOOK	16609	1234	CH 10	0
566	GSE #7 SAMPLE 17	15900	1236	CH 11	0
568	CH 3	17277	1238	CH 12	0
570	CH 4	15711	1240	CH 13	0
	CH 5			CH 14	0
	CH 6			CH 15	0
	CH 7				

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE	DEG C
1090	SCAN MOTOR A1-1	17817	22.59	
1092	SCAN MOTOR A1-2	18949	24.03	
1094	FEED HORN A1-1	19600	26.32	
1096	FEED HORN A1-2	20592	28.25	
1098	RF MUX A1-1	21257	29.33	
1100	RF MUX A1-2	22384	31.62	
1102	LOCAL OSCILLATOR CHANNEL 3	23261	33.54	
1104	LOCAL OSCILLATOR CHANNEL 4	23670	33.64	
1106	LOCAL OSCILLATOR CHANNEL 5	22619	32.26	
1108	LOCAL OSCILLATOR CHANNEL 6	21714	29.58	
1110	LOCAL OSCILLATOR CHANNEL 7	21915	30.69	
1112	LOCAL OSCILLATOR CHANNEL 8	23110	33.03	
1114	LOCAL OSCILLATOR CHANNEL 15	22963	32.33	
1116	PILO #2	21180	29.21	
1118	PILO #1	24099	34.89	
1120	1553 INTERFACE	17172	34.46	
1122	MIXER/IF AMPLIFIER CHANNEL 3	22660	32.09	
1124	MIXER/IF AMPLIFIER CHANNEL 4	22828	31.95	
1126	MIXER/IF AMPLIFIER CHANNEL 5	22494	31.71	
1128	MIXER/IF AMPLIFIER CHANNEL 6	21538	29.87	
1130	MIXER/IF AMPLIFIER CHANNEL 7	21494	30.35	
1132	MIXER/IF AMPLIFIER CHANNEL 8	22737	32.11	
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	21024	29.11	
1136	MIXER/IF AMPLIFIER CHANNEL 15	22719	32.38	
1138	IF AMPLIFIER CHANNEL 11 THRU 14	22487	31.52	
1140	IF AMPLIFIER CHANNEL 9	22657	31.30	
1142	IF AMPLIFIER CHANNEL 10	22514	31.95	
1144	IF AMPLIFIER CHANNEL 11	21680	29.47	
1146	DC/DC CONVERTER	24377	34.71	
1148	IF AMPLIFIER CHANNEL 13	21280	28.83	
1150	IF AMPLIFIER CHANNEL 14	21635	29.96	
1152	IF AMPLIFIER CHANNEL 12	21434	29.36	
1154	RF SHELF A1-1	21980	30.71	
1156	RF SHELF A1-2	22514	31.11	
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	19967	26.88	
1160	A1-1 WARM LOAD 1	23199	23.41	
1162	A1-1 WARM LOAD 2	23693	23.52	
1164	A1-1 WARM LOAD 3	23191	23.54	
1166	A1-1 WARM LOAD 4	23268	23.52	
1168	A1-1 WARM LOAD CENTER	23470	23.53	
1170	A1-2 WARM LOAD 1	24300	25.04	
1172	A1-2 WARM LOAD 2	24355	25.06	
1174	A1-2 WARM LOAD 3	24368	25.05	
1176	A1-2 WARM LOAD 4	24358	24.94	
1178	A1-2 WARM LOAD CENTER	24362	25.04	
1180	TEMP SENSOR REFERENCE VOLTAGE	25267		

DESCRIPTION      STATUS

ANTENNA IN FULL SCAN MODE      NO  
 ANTENNA IN WARM CAL MODE      NO  
 ANTENNA IN COLD CAL MODE      NO  
 ANTENNA IN NADIR MODE      NO  
 COLD CAL. POSITION LSB      ZERO  
 COLD CAL. POSITION MSB      ZERO  
 PLO REDUNDANCY      PLO # 1  
 SCANNER A1-1 POWER      ON  
 SCANNER A1-2 POWER      ON  
 PLO #1 LOCK      YES  
 PLO #2 LOCK      OFF  
 ADC LATCHUP FLAG      ONE

ENGINEERING DATA

DESCRIPTION	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	22.2
A1-1 RF SHELF TEMPERATURE #1	27.9
A1-1 WARM LOAD TEMPERATURE	22.9
A1-2 SCANNER MOTOR TEMPERATURE	24.3
A1-2 RF SHELF TEMPERATURE #1	31.6
A1-2 WARM LOAD TEMPERATURE	24.6
A1-1 RF SHELF TEMPERATURE #2	27.8
A1-2 RF SHELF TEMPERATURE #2	31.2

DESCRIPTION	VALUE	MA/VOLTS
SIGNAL PROCESSOR	22051	5.0
	21821	15.2
	21797	-14.8
SCAN DRIVE	22163	5.0
	22151	15.1
	21857	-15.6
PLO	22564	14.6
	22074	-15.8
RECEIVER	21819	7.7
MIXER/IF AMPLIFIER A1-1	21417	10.2
A1-2	21430	10.1
LO CHANNEL 6	21396	10.2
7	21447	10.1
SPARE	32767	312.0
LO CHANNEL 3	21246	10.2
4	21184	10.2
5	21396	10.1
8	21308	10.1
15	22012	15.1
QUIET BUS CURRENT	15957	2217.2
A1-1 NOISY POWER BUS CURRENT	65	6.1
A1-2 NOISY POWER BUS CURRENT	40	5.0

## PRT TEMPERATURES

## VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

## BASEPLATE

## THERMOCOUPLE TEMPERATURES

## FIXED TARGET SHROUD

## VARIABLE TARGET SHROUD

## FIXED TARGET N2

## VARIABLE TARGET N2

## HEATER N2

## FIXED TARGET FLOW METER

## VARIABLE TARGET FLOW METER

## BASEPLATE HEATER N2

## BASEPLATE N2

## BASEPLATE FLOW METER

## ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00



[ 5 ] SCIENCE DATA ELEMENT 0000

[ 6 ] CONTROL/STATUS ELEMENT 00

[ 7 ] ENGINEERING ELEMENT 00

COMMANDS

[ 9 ]	SCANNER A1-1 POWER =	ON	PLLO POWER =	PLLO#1 [ 15 ]
[ 10 ]	SCANNER A1-2 POWER =	ON	COLD CAL POSITION 1 =	YES [ 16 ]
[ 11 ]	ANTENNA FULL SCAN MODE =	NO	2 =	NO [ 17 ]
[ 12 ]	WARM CAL =	NO	3 =	NO [ 18 ]
[ 13 ]	COLD CAL =	NO	COLD CAL POSITION 4 =	NO [ 19 ]
[ 14 ]	NADIR =	NO	RESET C&DH PROCESSOR	[ 20 ]
			GSE MODE	[ 21 ]

ENGR OK POWER ON CHECKSUM IN B311 CALC B311 SA28 258 SA29 467  
 SCREEN ONLY [ 2 ] PRINT [ 3 ] FULL [ 1 ] RETURN

SELECT BUTTON 3

*GSE mode 4*  
*R. Hall*  
*11/17/98*  
*P. 3.3.6.6*

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	GSE #4 SAMPLE 17	16794
2		00000011	574		16479
3	PACKET LENGTH	00000010	576		16707
4		10111111	578		18031
5	UNIT SERIAL NUMBER	00000011	580		18208
6		10000000	582		17990
7	INSTRUMENT MODE/STATUS	10011010	584		19985
8		00000000	586		16630
10	REFLECTOR 1 POSITION 1	2536	588	REFLECTOR 1 POSITION 18	2536
12	REFLECTOR 2 POSITION 1	2189	590	REFLECTOR 2 POSITION 18	2189
14	REFL 1 POS 1 2ND LOOK	2536	592	REFL 1 POS 18 2ND LOOK	2536
16	REFL 2 POS 1 2ND LOOK	2189	594	REFL 2 POS 18 2ND LOOK	2189
18	GSE #4 SAMPLE 1	16048	596	GSE #4 SAMPLE 18	16050
20		16648	598		16649
22		15944	600		15946
24		17246	602		17250
26		15682	604		15678
28		16794	606		16796
30		16481	608		16479
32		16706	610		16711
34		18030	612		18026
36		18214	614		18212
38		17981	616		17978
40		19996	618		20012
42		16630	620		16630
44	REFLECTOR 1 POSITION 2	2536	622	REFLECTOR 1 POSITION 19	2536
46	REFLECTOR 2 POSITION 2	2189	624	REFLECTOR 2 POSITION 19	2189
48	REFL 1 POS 2 2ND LOOK	2536	626	REFL 1 POS 19 2ND LOOK	2536
50	REFL 2 POS 2 2ND LOOK	2189	628	REFL 2 POS 19 2ND LOOK	2189
52	GSE #4 SAMPLE 2	16053	630	GSE #4 SAMPLE 19	16046
54		16649	632		16648
56		15945	634		15947
58		17245	636		17250
60		15678	638		15680
62		16792	640		16792
64		16481	642		16481
66		16709	644		16702
68		18031	646		18032
70		18208	648		18214
72		17993	650		17983
74		19984	652		19992
76		16629	654		16629
78	REFLECTOR 1 POSITION 3	2536	656	REFLECTOR 1 POSITION 20	2536
80	REFLECTOR 2 POSITION 3	2189	658	REFLECTOR 2 POSITION 20	2189
82	REFL 1 POS 3 2ND LOOK	2536	660	REFL 1 POS 20 2ND LOOK	2536
84	REFL 2 POS 3 2ND LOOK	2189	662	REFL 2 POS 20 2ND LOOK	2189
86	GSE #4 SAMPLE 3	16043	664	GSE #4 SAMPLE 20	16047
88		16647	666		16649
90		15944	668		15944
92		17249	670		17250

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15685	672	CH 7	15682
96	CH 8	16793	674	CH 8	16794
98	CH 9	16482	676	CH 9	16480
100	CH 10	16707	678	CH 10	16703
102	CH 11	18028	680	CH 11	18025
104	CH 12	18207	682	CH 12	18209
106	CH 13	17996	684	CH 13	17992
108	CH 14	19998	686	CH 14	19996
110	CH 15	16631	688	CH 15	16629
112	REFLECTOR 1 POSITION 4	2536	690	REFLECTOR 1 POSITION 21	2536
114	REFLECTOR 2 POSITION 4	2189	692	REFLECTOR 2 POSITION 21	2189
116	REFL 1 POS 4 2ND LOOK	2536	694	REFL 1 POS 21 2ND LOOK	2536
118	REFL 2 POS 4 2ND LOOK	2189	696	REFL 2 POS 21 2ND LOOK	2189
120	GSE #4 SAMPLE 4	16047	698	GSE #4 SAMPLE 21	16046
122	CH 3	16648	700	CH 3	16650
124	CH 4	15948	702	CH 4	15943
126	CH 5	17248	704	CH 5	17255
128	CH 6	15680	706	CH 6	15679
130	CH 7	16795	708	CH 7	16794
132	CH 8	16477	710	CH 8	16479
134	CH 9	16694	712	CH 9	16702
136	CH 10	18029	714	CH 10	18033
138	CH 11	18216	716	CH 11	18214
140	CH 12	17986	718	CH 12	17985
142	CH 13	19996	720	CH 13	20002
144	CH 14	16630	722	CH 14	16630
146	CH 15	2536	724	CH 15	2536
148	REFLECTOR 1 POSITION 5	2189	726	REFLECTOR 1 POSITION 22	2189
150	REFLECTOR 2 POSITION 5	2536	728	REFLECTOR 2 POSITION 22	2536
152	REFL 1 POS 5 2ND LOOK	2189	730	REFL 1 POS 22 2ND LOOK	2189
154	REFL 2 POS 5 2ND LOOK	16046	732	REFL 2 POS 22 2ND LOOK	16043
156	GSE #4 SAMPLE 5	16649	734	GSE #4 SAMPLE 22	16646
158	CH 3	15949	736	CH 3	15947
160	CH 4	17248	738	CH 4	17248
162	CH 5	15678	740	CH 5	15683
164	CH 6	16793	742	CH 6	16796
166	CH 7	16481	744	CH 7	16487
168	CH 8	16706	746	CH 8	16695
170	CH 9	18027	748	CH 9	18029
172	CH 10	18218	750	CH 10	18207
174	CH 11	17996	752	CH 11	17988
176	CH 12	20000	754	CH 12	19978
178	CH 13	16628	756	CH 13	16628
180	CH 14	2536	758	CH 14	2536
182	CH 15	2189	760	CH 15	2189
184	REFLECTOR 1 POSITION 6	2536	762	REFLECTOR 1 POSITION 23	2536
186	REFLECTOR 2 POSITION 6	2189	764	REFLECTOR 2 POSITION 23	2189
188	REFL 1 POS 6 2ND LOOK	16046	766	REFL 1 POS 23 2ND LOOK	16044
190	REFL 2 POS 6 2ND LOOK	16649	768	REFL 2 POS 23 2ND LOOK	16649
192	GSE #4 SAMPLE 6	15949	770	GSE #4 SAMPLE 23	15942

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17246	772	CH 6	17247
196	CH 7	15681	774	CH 7	15680
198	CH 8	16793	776	CH 8	16792
200	CH 9	16480	778	CH 9	16477
202	CH 10	16708	780	CH 10	16700
204	CH 11	18027	782	CH 11	18028
206	CH 12	18209	784	CH 12	18223
208	CH 13	17986	786	CH 13	17976
210	CH 14	19987	788	CH 14	19984
212	CH 15	16630	790	CH 15	16630
214	REFLECTOR 1 POSITION 7	2536	792	REFLECTOR 1 POSITION 24	2536
216	REFLECTOR 2 POSITION 7	2189	794	REFLECTOR 2 POSITION 24	2189
218	REFL 1 POS 7 2ND LOOK	2536	796	REFL 1 POS 24 2ND LOOK	2536
220	REFL 2 POS 7 2ND LOOK	2189	798	REFL 2 POS 24 2ND LOOK	2189
222	GSE #4 SAMPLE 7	16047	800	GSE #4 SAMPLE 24	16047
224	CH 3	16651	802	CH 3	16646
226	CH 4	15949	804	CH 4	15946
228	CH 5	17251	806	CH 5	17247
230	CH 6	15681	808	CH 6	15681
232	CH 7	16797	810	CH 7	16797
234	CH 8	16479	812	CH 8	16483
236	CH 9	16706	814	CH 9	16701
238	CH 10	18027	816	CH 10	18027
240	CH 11	18218	818	CH 11	18220
242	CH 12	17987	820	CH 12	17989
244	CH 13	19992	822	CH 13	20008
246	CH 14	16631	824	CH 14	16629
248	CH 15	2536	826	CH 15	2536
250	REFLECTOR 1 POSITION 8	2189	828	REFLECTOR 1 POSITION 25	2189
252	REFLECTOR 2 POSITION 8	2536	830	REFLECTOR 2 POSITION 25	2536
254	REFL 1 POS 8 2ND LOOK	2189	832	REFL 1 POS 25 2ND LOOK	2189
256	REFL 2 POS 8 2ND LOOK	16051	834	REFL 2 POS 25 2ND LOOK	16044
258	GSE #4 SAMPLE 8	16654	836	GSE #4 SAMPLE 25	16645
260	CH 3	15948	838	CH 3	15946
262	CH 4	17251	840	CH 4	17248
264	CH 5	15675	842	CH 5	15679
266	CH 6	16794	844	CH 6	16796
268	CH 7	16480	846	CH 7	16478
270	CH 8	16712	848	CH 8	16701
272	CH 9	18024	850	CH 9	18022
274	CH 10	18215	852	CH 10	18210
276	CH 11	17970	854	CH 11	17990
278	CH 12	19970	856	CH 12	19977
280	CH 13	16629	858	CH 13	16630
282	CH 14	2536	860	CH 14	2536
284	CH 15	2189	862	CH 15	2189
286	REFLECTOR 1 POSITION 9	2536	864	REFLECTOR 1 POSITION 26	2536
288	REFL 1 POS 9 2ND LOOK	2189	866	REFL 1 POS 26 2ND LOOK	2189
290	REFL 2 POS 9 2ND LOOK	16044	868	REFL 2 POS 26 2ND LOOK	16042
292	GSE #4 SAMPLE 9	16648	870	GSE #4 SAMPLE 26	16650

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15950	872	CH 5	15947
296	CH 6	17248	874	CH 6	17249
298	CH 7	15683	876	CH 7	15678
300	CH 8	16795	878	CH 8	16799
302	CH 9	16483	880	CH 9	16481
304	CH 10	16710	882	CH 10	16703
306	CH 11	18030	884	CH 11	18025
308	CH 12	18218	886	CH 12	18218
310	CH 13	17992	888	CH 13	17983
312	CH 14	19987	890	CH 14	20004
314	CH 15	16630	892	CH 15	16630
316	REFLECTOR 1 POSITION 10	2536	894	REFLECTOR 1 POSITION 27	2536
318	REFLECTOR 2 POSITION 10	2189	896	REFLECTOR 2 POSITION 27	2189
320	REFL 1 POS 10 2ND LOOK	2536	898	REFL 1 POS 27 2ND LOOK	2536
322	REFL 2 POS 10 2ND LOOK	2189	900	REFL 2 POS 27 2ND LOOK	2189
324	GSE #4 SAMPLE 10	16045	902	GSE #4 SAMPLE 27	16045
326	CH 3	16648	904	CH 3	16646
328	CH 4	15947	906	CH 4	15947
330	CH 5	17245	908	CH 5	17247
332	CH 6	15681	910	CH 6	15677
334	CH 7	16794	912	CH 7	16794
336	CH 8	16480	914	CH 8	16482
338	CH 9	16709	916	CH 9	16709
340	CH 10	18025	918	CH 10	18031
342	CH 11	18209	920	CH 11	18208
344	CH 12	17976	922	CH 12	17989
346	CH 13	20000	924	CH 13	20022
348	CH 14	16629	926	CH 14	16631
350	CH 15	2536	928	CH 15	2536
352	REFLECTOR 1 POSITION 11	2189	930	REFLECTOR 1 POSITION 28	2189
354	REFLECTOR 2 POSITION 11	2536	932	REFLECTOR 2 POSITION 28	2536
356	REFL 1 POS 11 2ND LOOK	2189	934	REFL 1 POS 28 2ND LOOK	2189
358	REFL 2 POS 11 2ND LOOK	16050	936	REFL 2 POS 28 2ND LOOK	16048
360	GSE #4 SAMPLE 11	16649	938	GSE #4 SAMPLE 28	16650
362	CH 3	15948	940	CH 3	15943
364	CH 4	17248	942	CH 4	17249
366	CH 5	15676	944	CH 5	15682
368	CH 6	16795	946	CH 6	16793
370	CH 7	16479	948	CH 7	16481
372	CH 8	16705	950	CH 8	16706
374	CH 9	18026	952	CH 9	18030
376	CH 10	18210	954	CH 10	18218
378	CH 11	17990	956	CH 11	17990
380	CH 12	20001	958	CH 12	20005
382	CH 13	16629	960	CH 13	16631
384	CH 14	2536	962	CH 14	2536
386	CH 15	2189	964	CH 15	2189
388	REFLECTOR 1 POSITION 12	2536	966	REFLECTOR 1 POSITION 29	2536
390	REFLECTOR 2 POSITION 12	2189	968	REFLECTOR 2 POSITION 29	2189
392	REFL 1 POS 12 2ND LOOK	16043	970	REFL 1 POS 29 2ND LOOK	16040
	REFL 2 POS 12 2ND LOOK			REFL 2 POS 29 2ND LOOK	
	GSE #4 SAMPLE 12			GSE #4 SAMPLE 29	
	CH 3			CH 3	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16649	972	CH 4	16647
396	CH 5	15949	974	CH 5	15949
398	CH 6	17249	976	CH 6	17249
400	CH 7	15681	978	CH 7	15680
402	CH 8	16793	980	CH 8	16793
404	CH 9	16479	982	CH 9	16477
406	CH 10	16705	984	CH 10	16702
408	CH 11	18028	986	CH 11	18030
410	CH 12	18214	988	CH 12	18201
412	CH 13	17986	990	CH 13	17988
414	CH 14	19976	992	CH 14	19982
416	CH 15	16629	994	CH 15	16630
418	REFLECTOR 1 POSITION 13	2536	996	REFLECTOR 1 POSITION 30	2536
420	REFLECTOR 2 POSITION 13	2189	998	REFLECTOR 2 POSITION 30	2189
422	REFL 1 POS 13 2ND LOOK	2536	1000	REFL 1 POS 30 2ND LOOK	2536
424	REFL 2 POS 13 2ND LOOK	2189	1002	REFL 2 POS 30 2ND LOOK	2189
426	GSE #4 SAMPLE 13	16044	1004	GSE #4 SAMPLE 30	16048
428	CH 3	16650	1006	CH 3	16648
430	CH 4	15948	1008	CH 4	15944
432	CH 5	17248	1010	CH 5	17252
434	CH 6	15680	1012	CH 6	15681
436	CH 7	16793	1014	CH 7	15681
438	CH 8	16478	1016	CH 8	16795
440	CH 9	16704	1018	CH 9	16480
442	CH 10	18030	1020	CH 10	16700
444	CH 11	18215	1022	CH 11	18034
446	CH 12	17991	1024	CH 12	18212
448	CH 13	19993	1026	CH 13	17992
450	CH 14	16631	1028	CH 14	19993
452	CH 15	2536	1030	CH 15	16630
454	REFLECTOR 1 POSITION 14	2189	1032	REFLECTOR 1 COLD CAL POS	OE
456	REFLECTOR 2 POSITION 14	2536	1034	REFLECTOR 2 COLD CAL POS	OE
458	REFL 1 POS 14 2ND LOOK	2189	1036	REFL 1 COLD CAL 2ND LOOK	OE
460	REFL 2 POS 14 2ND LOOK	16045	1038	REFL 2 COLD CAL 2ND LOOK	OE
462	GSE #4 SAMPLE 14	16651	1040	COLD CAL DATA 1	0
464	CH 3	15950	1042	CH 3	0
466	CH 4	17252	1044	CH 4	0
468	CH 5	15680	1046	CH 5	0
470	CH 6	16794	1048	CH 6	0
472	CH 7	16479	1050	CH 7	0
474	CH 8	16704	1052	CH 8	0
476	CH 9	18024	1054	CH 9	0
478	CH 10	18212	1056	CH 10	0
480	CH 11	17973	1058	CH 11	0
482	CH 12	19994	1060	CH 12	0
484	CH 13	16629	1062	CH 13	0
486	CH 14	2536	1064	CH 14	0
488	CH 15	2189	1066	CH 15	0
490	REFLECTOR 1 POSITION 15	2536	1068	REFLECTOR 1 COLD CAL DATA 2	0
492	REFLECTOR 2 POSITION 15	2189	1070	REFLECTOR 2 COLD CAL DATA 2	0
494	REFL 1 POS 15 2ND LOOK	2536		REFL 1 COLD CAL DATA 2	0
496	REFL 2 POS 15 2ND LOOK	2189		REFL 2 COLD CAL DATA 2	0

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	GSE #4 SAMPLE 15	CH 3	1072		CH 7
496		CH 4	16648		CH 8
498		CH 5	15945		CH 9
500		CH 6	17247		CH 10
502		CH 7	15680		CH 11
504		CH 8	16793		CH 12
506		CH 9	16482		CH 13
508		CH 10	16702		CH 14
510		CH 11	18022		CH 15
512		CH 12	18200	REFLECTOR 1 WARM CAL POS	OE
514		CH 13	17992	REFLECTOR 2 WARM CAL POS	OE
516		CH 14	19999	REFL 1 WARM CAL 2ND LOOK	OE
518		CH 15	16630	REFL 2 WARM CAL 2ND LOOK	OE
520	REFLECTOR 1 POSITION 16	CH 3	2536	WARM CAL DATA 1	0
522	REFLECTOR 2 POSITION 16	CH 4	2189		0
524	REFL 1 POS 16	CH 5	2536		0
526	REFL 2 POS 16 2ND LOOK	CH 6	2189		0
528	GSE #4 SAMPLE 16	CH 7	16043		0
530		CH 8	16650		0
532		CH 9	15948		0
534		CH 10	17245		0
536		CH 11	15681		0
538		CH 12	16793		0
540		CH 13	16479		0
542		CH 14	16705		0
544		CH 15	18026		0
546		CH 16	18214		0
548		CH 17	17983	WARM CAL DATA 2	0
550		CH 18	20002		0
552		CH 19	16630		0
554	REFLECTOR 1 POSITION 17	CH 3	2536		0
556	REFLECTOR 2 POSITION 17	CH 4	2189		0
558	REFL 1 POS 17 2ND LOOK	CH 5	2536		0
560	REFL 2 POS 17 2ND LOOK	CH 6	2189		0
562	GSE #4 SAMPLE 17	CH 7	16046		0
564		CH 8	16650		0
566		CH 9	15944		0
568		CH 10	17247		0
570		CH 11	15679		0

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE	DEG C
1090	SCAN MOTOR A1-1	17787		22.53
1092	SCAN MOTOR A1-2	18910		23.96
1094	FEED HORN A1-1	19494		26.12
1096	FEED HORN A1-2	20451		27.98
1098	RF MUX A1-1	21100		29.03
1100	RF MUX A1-2	22190		31.24
1102	LOCAL OSCILLATOR CHANNEL 3	23067		33.16
1104	LOCAL OSCILLATOR CHANNEL 4	23476		33.27
1106	LOCAL OSCILLATOR CHANNEL 5	22437		31.91
1108	LOCAL OSCILLATOR CHANNEL 6	21586		29.34
1110	LOCAL OSCILLATOR CHANNEL 7	21749		30.37
1112	LOCAL OSCILLATOR CHANNEL 8	22927		32.68
1114	LOCAL OSCILLATOR CHANNEL 15	22783		31.98
1116	PLLO #2	21006		28.87
1118	PLLO #1	23913		34.53
1120	1553 INTERFACE	17016		34.16
1122	MIXER/IF AMPLIFIER CHANNEL 3	22463		31.70
1124	MIXER/IF AMPLIFIER CHANNEL 4	22630		31.57
1126	MIXER/IF AMPLIFIER CHANNEL 5	22305		31.34
1128	MIXER/IF AMPLIFIER CHANNEL 6	21378		29.57
1130	MIXER/IF AMPLIFIER CHANNEL 7	21328		30.03
1132	MIXER/IF AMPLIFIER CHANNEL 8	22541		31.74
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	20869		28.82
1136	MIXER/IF AMPLIFIER CHANNEL 15	22545		32.05
1138	IF AMPLIFIER CHANNEL 11 THRU 14	22310		31.15
1140	IF AMPLIFIER CHANNEL 9	22479		30.85
1142	IF AMPLIFIER CHANNEL 10	22336		31.61
1144	IF AMPLIFIER CHANNEL 11	21532		29.19
1146	DC/DC CONVERTER	24216		34.39
1148	IF AMPLIFIER CHANNEL 13	21132		28.54
1150	IF AMPLIFIER CHANNEL 14	21487		29.68
1152	IF AMPLIFIER CHANNEL 12	21285		29.07
1154	RF SHELF A1-1	21807		30.38
1156	RF SHELF A1-2	22324		30.74
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	19855		26.67
1160	A1-1 WARM LOAD 1	23164		23.34
1162	A1-1 WARM LOAD 2	23657		23.45
1164	A1-1 WARM LOAD 3	23156		23.48
1166	A1-1 WARM LOAD 4	23238		23.46
1168	A1-1 WARM LOAD CENTER	23441		23.48
1170	A1-2 WARM LOAD 1	24247		24.94
1172	A1-2 WARM LOAD 2	24298		24.95
1174	A1-2 WARM LOAD 3	24313		24.94
1176	A1-2 WARM LOAD 4	24306		24.84
1178	A1-2 WARM LOAD CENTER	24310		24.93
1180	TEMP SENSOR REFERENCE VOLTAGE	25267		



DESCRIPTION	STATUS
ANTENNA IN FULL SCAN MODE	NO
ANTENNA IN WARM CAL MODE	NO
ANTENNA IN COLD CAL MODE	NO
ANTENNA IN NADIR MODE	NO
COLD CAL. POSITION LSB	ZERO
COLD CAL. POSITION MSB	ZERO
PLO REDUNDANCY	PLO # 1
SCANNER A1-1 POWER	ON
SCANNER A1-2 POWER	ON
PLO #1 LOCK	YES
PLO #2 LOCK	OFF
ADC LATCHUP FLAG	ONE

DESCRIPTION	VALUE	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	22110	4.9
A1-1 RF SHELF TEMPERATURE #1	21826	15.1
A1-1 WARM LOAD TEMPERATURE	21793	-15.0
A1-2 SCANNER MOTOR TEMPERATURE	22190	4.9
A1-2 RF SHELF TEMPERATURE #1	22206	14.9
A1-2 WARM LOAD TEMPERATURE	21882	-15.1
A1-1 RF SHELF TEMPERATURE #2	22570	14.8
A1-2 RF SHELF TEMPERATURE #2	22073	-15.2
	21819	7.9
	21419	10.0
	21430	10.0
	21397	10.0
	21448	10.0
	32767	327.7
	21242	10.1
	21180	10.1
	21399	10.0
	21304	10.0
	22015	15.0
	16024	2201.3
	57	0.4
	37	0.3

DESCRIPTION	VALUE	MA/VOLTS
SIGNAL PROCESSOR	+5 VDC	
	+15 VDC	
	-15 VDC	
SCAN DRIVE	+5 VDC	
	+15 VDC	
	-15 VDC	
PLO	+15 VDC	
	-15 VDC	
RECEIVER	+8 VDC	
MIXER/IF AMPLIFIER A1-1	+10 VDC	
A1-2	+10 VDC	
LO CHANNEL 6	+10 VDC	
7	+10 VDC	
SPARE		
LO CHANNEL 3	+10 VDC	
4	+10 VDC	
5	+10 VDC	
8	+10 VDC	
15	+15 VDC	
QUIET BUS CURRENT		
A1-1 NOISY POWER BUS CURRENT		
A1-2 NOISY POWER BUS CURRENT		

## PRT TEMPERATURES

## VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

## FIXED TARGET

## BASEPLATE

## THERMOCOUPLE TEMPERATURES

## FIXED TARGET SHROUD

## VARIABLE TARGET SHROUD

## FIXED TARGET N2

## VARIABLE TARGET N2

## HEATER N2

## FIXED TARGET FLOW METER

## VARIABLE TARGET FLOW METER

## BASEPLATE HEATER N2

## BASEPLATE N2

## BASEPLATE FLOW METER

## ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00

[ 5 ] SCIENCE DATA ELEMENT 0000

[ 6 ] CONTROL/STATUS ELEMENT 00

[ 7 ] ENGINEERING ELEMENT 00

COMMANDS

[ 9 ]	SCANNER A1-1 POWER =	ON	PLLO POWER =	PLLO#1 [ 15 ]
[ 10 ]	SCANNER A1-2 POWER =	ON	COLD CAL POSITION 1 =	YES [ 16 ]
[ 11 ]	ANTENNA FULL SCAN MODE =	NO	2 =	NO [ 17 ]
[ 12 ]	WARM CAL =	NO	3 =	NO [ 18 ]
[ 13 ]	COLD CAL =	NO	COLD CAL POSITION 4 =	NO [ 19 ]
[ 14 ]	NADIR =	NO	RESET C&DH PROCESSOR	[ 20 ]
			GSE MODE	[ 21 ]

ENGR OK POWER ON CHECKSUM IN 883F CALC 883F SA28 282 SA29 514  
 SCREEN ONLY [ 2 ] PRINT [ 3 ] FULL [ 1 ] RETURN

SELECT BUTTON 3

*GSE MODE 5*  
*R. B. S.*  
*11/17/88*  
*P. 3.3.6.6*

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	GSE #5 SAMPLE 17	16775
2		00000011	574		16505
3	PACKET LENGTH	00000010	576		16747
4		10111111	578		18045
5	UNIT SERIAL NUMBER	00000011	580		18234
6		10100000	582		18007
7	INSTRUMENT MODE/STATUS	10011010	584		20032
8		00000000	586		16651
10	REFLECTOR 1 POSITION 1	15279	588	REFLECTOR 1 POSITION 18	15279
12	REFLECTOR 2 POSITION 1	14926	590	REFLECTOR 2 POSITION 18	14926
14	REFL 1 POS 1 2ND LOOK	15279	592	REFL 1 POS 18 2ND LOOK	15279
16	REFL 2 POS 1 2ND LOOK	14926	594	REFL 2 POS 18 2ND LOOK	14926
18	GSE #5 SAMPLE 1	16050	596	GSE #5 SAMPLE 18	16046
20		16618	598		16618
22		15920	600		15917
24		17288	602		17286
26		15718	604		15717
28		16775	606		16779
30		16502	608		16508
32		16750	610		16741
34		18040	612		18040
36		18233	614		18242
38		18015	616		18005
40		20017	618		20006
42		16651	620		16652
44	REFLECTOR 1 POSITION 2	15279	622	REFLECTOR 1 POSITION 19	15279
46	REFLECTOR 2 POSITION 2	14926	624	REFLECTOR 2 POSITION 19	14926
48	REFL 1 POS 2 2ND LOOK	15279	626	REFL 1 POS 19 2ND LOOK	15279
50	REFL 2 POS 2 2ND LOOK	14926	628	REFL 2 POS 19 2ND LOOK	14926
52	GSE #5 SAMPLE 2	16044	630	GSE #5 SAMPLE 19	16049
54		16621	632		16622
56		15920	634		15918
58		17282	636		17282
60		15715	638		15718
62		16780	640		16782
64		16504	642		16500
66		16743	644		16747
68		18051	646		18045
70		18235	648		18237
72		18013	650		18027
74		20040	652		20044
76		16651	654		16653
78	REFLECTOR 1 POSITION 3	15279	656	REFLECTOR 1 POSITION 20	15279
80	REFLECTOR 2 POSITION 3	14926	658	REFLECTOR 2 POSITION 20	14926
82	REFL 1 POS 3 2ND LOOK	15279	660	REFL 1 POS 20 2ND LOOK	15279
84	REFL 2 POS 3 2ND LOOK	14926	662	REFL 2 POS 20 2ND LOOK	14926
86	GSE #5 SAMPLE 3	16047	664	GSE #5 SAMPLE 20	16045
88		16618	666		16621
90		15920	668		15923
92		17287	670		17284

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15720	672	CH 7	15717
96	CH 8	16778	674	CH 8	16780
98	CH 9	16504	676	CH 9	16503
100	CH 10	16746	678	CH 10	16743
102	CH 11	18049	680	CH 11	18040
104	CH 12	18236	682	CH 12	18244
106	CH 13	18004	684	CH 13	18007
108	CH 14	20026	686	CH 14	20006
110	CH 15	16651	688	CH 15	16651
112	REFLECTOR 1 POSITION 4	15280	690	REFLECTOR 1 POSITION 21	15279
114	REFLECTOR 2 POSITION 4	14926	692	REFLECTOR 2 POSITION 21	14926
116	REFL 1 POS 4 2ND LOOK	15280	694	REFL 1 POS 21 2ND LOOK	15279
118	REFL 2 POS 4 2ND LOOK	14926	696	REFL 2 POS 21 2ND LOOK	14926
120	GSE #5 SAMPLE 4	16042	698	GSE #5 SAMPLE 21	16047
122	CH 3	16619	700	CH 3	16618
124	CH 4	15920	702	CH 4	15920
126	CH 5	17285	704	CH 5	17289
128	CH 6	15718	706	CH 6	15720
130	CH 7	16781	708	CH 7	16780
132	CH 8	16500	710	CH 8	16501
134	CH 9	16745	712	CH 9	16748
136	CH 10	18041	714	CH 10	18040
138	CH 11	18246	716	CH 11	18232
140	CH 12	18013	718	CH 12	18007
142	CH 13	19986	720	CH 13	20053
144	CH 14	16652	722	CH 14	16651
146	CH 15	15280	724	CH 15	15279
148	REFLECTOR 1 POSITION 5	14926	726	REFLECTOR 1 POSITION 22	14926
150	REFLECTOR 2 POSITION 5	15280	728	REFLECTOR 2 POSITION 22	15279
152	REFL 1 POS 5 2ND LOOK	14926	730	REFL 1 POS 22 2ND LOOK	14926
154	REFL 2 POS 5 2ND LOOK	16046	732	REFL 2 POS 22 2ND LOOK	16047
156	GSE #5 SAMPLE 5	16617	734	GSE #5 SAMPLE 22	16620
158	CH 3	15918	736	CH 3	15919
160	CH 4	17283	738	CH 4	17286
162	CH 5	15717	740	CH 5	15720
164	CH 6	16781	742	CH 6	16776
166	CH 7	16501	744	CH 7	16504
168	CH 8	16750	746	CH 8	16742
170	CH 9	18050	748	CH 9	18045
172	CH 10	18234	750	CH 10	18234
174	CH 11	17999	752	CH 11	18020
176	CH 12	20011	754	CH 12	20000
178	CH 13	16652	756	CH 13	16649
180	CH 14	15280	758	CH 14	15279
182	CH 15	14926	760	CH 15	14926
184	REFLECTOR 1 POSITION 6	15280	762	REFLECTOR 1 POSITION 23	15279
186	REFLECTOR 2 POSITION 6	14926	764	REFLECTOR 2 POSITION 23	14926
188	REFL 1 POS 6 2ND LOOK	16046	766	REFL 1 POS 23 2ND LOOK	16048
190	REFL 2 POS 6 2ND LOOK	16619	768	REFL 2 POS 23 2ND LOOK	16618
192	GSE #5 SAMPLE 6	15920	770	GSE #5 SAMPLE 23	15921

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17291	772	CH 6	17286
196	CH 7	15718	774	CH 7	15720
198	CH 8	16780	776	CH 8	16781
200	CH 9	16502	778	CH 9	16505
202	CH 10	16743	780	CH 10	16748
204	CH 11	18051	782	CH 11	18048
206	CH 12	18245	784	CH 12	18235
208	CH 13	18006	786	CH 13	18010
210	CH 14	20007	788	CH 14	20020
212	CH 15	16653	790	CH 15	16653
214	REFLECTOR 1 POSITION 7	15280	792	REFLECTOR 1 POSITION 24	15279
216	REFLECTOR 2 POSITION 7	14926	794	REFLECTOR 2 POSITION 24	14926
218	REFL 1 POS 7 2ND LOOK	15280	796	REFL 1 POS 24 2ND LOOK	15279
220	REFL 2 POS 7 2ND LOOK	14926	798	REFL 2 POS 24 2ND LOOK	14926
222	GSE #5 SAMPLE 7	16047	800	GSE #5 SAMPLE 24	16054
224	CH 4	16619	802	CH 4	16616
226	CH 5	15917	804	CH 5	15920
228	CH 6	17289	806	CH 6	17288
230	CH 7	15717	808	CH 7	15720
232	CH 8	16779	810	CH 8	16777
234	CH 9	16501	812	CH 9	16505
236	CH 10	16738	814	CH 10	16748
238	CH 11	18052	816	CH 11	18041
240	CH 12	18238	818	CH 12	18230
242	CH 13	18016	820	CH 13	18019
244	CH 14	20025	822	CH 14	20010
246	CH 15	16652	824	CH 15	16650
248	REFLECTOR 1 POSITION 8	15280	826	REFLECTOR 1 POSITION 25	15279
250	REFLECTOR 2 POSITION 8	14926	828	REFLECTOR 2 POSITION 25	14926
252	REFL 1 POS 8 2ND LOOK	15280	830	REFL 1 POS 25 2ND LOOK	15280
254	REFL 2 POS 8 2ND LOOK	14926	832	REFL 2 POS 25 2ND LOOK	14926
256	GSE #5 SAMPLE 8	16051	834	GSE #5 SAMPLE 25	16055
258	CH 4	16618	836	CH 4	16618
260	CH 5	15917	838	CH 5	15915
262	CH 6	17290	840	CH 6	17285
264	CH 7	15718	842	CH 7	15720
266	CH 8	16780	844	CH 8	16780
268	CH 9	16504	846	CH 9	16505
270	CH 10	16746	848	CH 10	16744
272	CH 11	18040	850	CH 11	18042
274	CH 12	18233	852	CH 12	18233
276	CH 13	18024	854	CH 13	18001
278	CH 14	20009	856	CH 14	20025
280	CH 15	16651	858	CH 15	16652
282	REFLECTOR 1 POSITION 9	15280	860	REFLECTOR 1 POSITION 26	15280
284	REFLECTOR 2 POSITION 9	14926	862	REFLECTOR 2 POSITION 26	14926
286	REFL 1 POS 9 2ND LOOK	15280	864	REFL 1 POS 26 2ND LOOK	15280
288	REFL 2 POS 9 2ND LOOK	14926	866	REFL 2 POS 26 2ND LOOK	14926
290	GSE #5 SAMPLE 9	16053	868	GSE #5 SAMPLE 26	16051
292	CH 3	16619	870	CH 4	16620



ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15919	872	CH 5	15921
296	CH 6	17284	874	CH 6	17286
298	CH 7	15718	876	CH 7	15719
300	CH 8	16781	878	CH 8	16777
302	CH 9	16507	880	CH 9	16506
304	CH 10	16740	882	CH 10	16745
306	CH 11	18044	884	CH 11	18044
308	CH 12	18233	886	CH 12	18245
310	CH 13	18001	888	CH 13	18009
312	CH 14	20005	890	CH 14	20023
314	CH 15	16653	892	CH 15	16650
316	REFLECTOR 1 POSITION 10	15280	894	REFLECTOR 1 POSITION 27	15280
318	REFLECTOR 2 POSITION 10	14926	896	REFLECTOR 2 POSITION 27	14926
320	REFL 1 POS 10 2ND LOOK	15280	898	REFL 1 POS 27 2ND LOOK	15280
322	REFL 2 POS 10 2ND LOOK	14926	900	REFL 2 POS 27 2ND LOOK	14926
324	GSE #5 SAMPLE 10	16051	902	GSE #5 SAMPLE 27	16049
326	CH 3	16621	904	CH 3	16614
328	CH 4	15920	906	CH 4	15918
330	CH 5	17284	908	CH 5	17286
332	CH 6	15719	910	CH 6	15716
334	CH 7	16780	912	CH 7	16777
336	CH 8	16506	914	CH 8	16503
338	CH 9	16743	916	CH 9	16742
340	CH 10	18046	918	CH 10	18043
342	CH 11	18240	920	CH 11	18237
344	CH 12	18002	922	CH 12	18007
346	CH 13	20028	924	CH 13	20007
348	CH 14	16651	926	CH 14	16651
350	CH 15	15280	928	CH 15	15280
352	REFLECTOR 1 POSITION 11	14926	930	REFLECTOR 1 POSITION 28	14926
354	REFLECTOR 2 POSITION 11	15280	932	REFLECTOR 2 POSITION 28	15280
356	REFL 1 POS 11 2ND LOOK	14926	934	REFL 1 POS 28 2ND LOOK	14926
358	REFL 2 POS 11 2ND LOOK	16051	936	REFL 2 POS 28 2ND LOOK	16044
360	GSE #5 SAMPLE 11	16621	938	GSE #5 SAMPLE 28	16044
362	CH 3	16621	940	CH 3	16618
364	CH 4	15919	942	CH 4	15917
366	CH 5	17284	944	CH 5	17284
368	CH 6	15719	946	CH 6	15719
370	CH 7	16778	948	CH 7	16777
372	CH 8	16504	950	CH 8	16502
374	CH 9	16744	952	CH 9	16743
376	CH 10	18050	954	CH 10	18044
378	CH 11	18239	956	CH 11	18235
380	CH 12	18015	958	CH 12	18000
382	CH 13	20029	960	CH 13	20011
384	CH 14	16651	962	CH 14	16651
386	CH 15	15280	964	CH 15	15280
388	REFLECTOR 1 POSITION 12	14926	966	REFLECTOR 1 POSITION 29	14926
390	REFLECTOR 2 POSITION 12	15280	968	REFLECTOR 2 POSITION 29	15280
392	REFL 1 POS 12 2ND LOOK	14926	970	REFL 1 POS 29 2ND LOOK	14926
	REFL 2 POS 12 2ND LOOK	16051		REFL 2 POS 29 2ND LOOK	16053
	GSE #5 SAMPLE 12			GSE #5 SAMPLE 29	



ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16618	972	CH 4	16620
396	CH 5	15918	974	CH 5	15921
398	CH 6	17283	976	CH 6	17284
400	CH 7	15718	978	CH 7	15718
402	CH 8	16779	980	CH 8	16777
404	CH 9	16504	982	CH 9	16503
406	CH 10	16741	984	CH 10	16745
408	CH 11	18045	986	CH 11	18043
410	CH 12	18233	988	CH 12	18239
412	CH 13	18015	990	CH 13	18029
414	CH 14	20001	992	CH 14	20041
416	CH 15	16651	994	CH 15	16650
418	REFLECTOR 1 POSITION 13	15280	996	REFLECTOR 1 POSITION 30	15280
420	REFLECTOR 2 POSITION 13	14926	998	REFLECTOR 2 POSITION 30	14926
422	REFL 1 POS 13 2ND LOOK	15280	1000	REFL 1 POS 30 2ND LOOK	15280
424	REFL 2 POS 13 2ND LOOK	14926	1002	REFL 2 POS 30 2ND LOOK	14926
426	GSE #5 SAMPLE 13	16049	1004	GSE #5 SAMPLE 30	16043
428	CH 3	16620	1006	CH 3	16619
430	CH 4	15916	1008	CH 4	15922
432	CH 5	17284	1010	CH 5	17283
434	CH 6	15719	1012	CH 6	15718
436	CH 7	16777	1014	CH 7	16779
438	CH 8	16499	1016	CH 8	16504
440	CH 9	16743	1018	CH 9	16749
442	CH 10	18041	1020	CH 10	18042
444	CH 11	18239	1022	CH 11	18240
446	CH 12	18006	1024	CH 12	17988
448	CH 13	20011	1026	CH 13	20021
450	CH 14	16651	1028	CH 14	16651
452	CH 15	15280	1030	CH 15	15280
454	REFLECTOR 1 POSITION 14	14926	1032	REFLECTOR 1 COLD CAL POS	14926
456	REFLECTOR 2 POSITION 14	14926	1034	REFLECTOR 2 COLD CAL POS	14926
458	REFL 1 POS 14 2ND LOOK	15280	1036	REFL 1 COLD CAL 2ND LOOK	15280
460	REFL 2 POS 14 2ND LOOK	14926	1038	REFL 2 COLD CAL 2ND LOOK	14926
462	GSE #5 SAMPLE 14	16051	1040	COLD CAL DATA 1	16051
464	CH 3	16618	1042	CH 3	16623
466	CH 4	15916	1044	CH 4	15922
468	CH 5	17286	1046	CH 5	17286
470	CH 6	15717	1048	CH 6	15718
472	CH 7	16776	1050	CH 7	16775
474	CH 8	16504	1052	CH 8	16505
476	CH 9	18049	1054	CH 9	16743
478	CH 10	18241	1056	CH 10	18045
480	CH 11	18013	1058	CH 11	18231
482	CH 12	20000	1060	CH 12	18007
484	CH 13	16651	1062	CH 13	18007
486	CH 14	15280	1064	CH 14	20017
488	CH 15	14926	1066	CH 15	16650
490	REFLECTOR 1 POSITION 15	14926	1068	REFLECTOR 1 COLD CAL DATA 2	30561
492	REFLECTOR 2 POSITION 15	14926	1070	REFLECTOR 2 COLD CAL DATA 2	29853
494	REFL 1 POS 15 2ND LOOK	15280		REFL 1 POS 30 2ND LOOK	30561
496	REFL 2 POS 15 2ND LOOK	14926		REFL 2 POS 30 2ND LOOK	29853
498	GSE #5 SAMPLE 15	16049		GSE #5 SAMPLE 30	30561
500	CH 3	16620		CH 3	16619
502	CH 4	15916		CH 4	15922
504	CH 5	17284		CH 5	17283
506	CH 6	15719		CH 6	15718
508	CH 7	16777		CH 7	16779
510	CH 8	16499		CH 8	16504
512	CH 9	16743		CH 9	16749
514	CH 10	18041		CH 10	18042
516	CH 11	18239		CH 11	18240
518	CH 12	18006		CH 12	17988
520	CH 13	20011		CH 13	20021
522	CH 14	16651		CH 14	16651
524	CH 15	15280		CH 15	15280



ELEMENT	DESCRIPTION	VALUE	TEMPERATURE	DEG C
1090	SCAN MOTOR A1-1	18236	23.38	
1092	SCAN MOTOR A1-2	18024	22.29	
1094	FEED HORN A1-1	20021	27.12	
1096	FEED HORN A1-2	16650	20.80	
1098	RF MUX A1-1	30561	47.52	
1100	RF MUX A1-2	29853	46.32	
1102	LOCAL OSCILLATOR CHANNEL 3	30561	47.85	
1104	LOCAL OSCILLATOR CHANNEL 4	29853	45.78	
1106	LOCAL OSCILLATOR CHANNEL 5	16049	19.80	
1108	LOCAL OSCILLATOR CHANNEL 6	16622	19.96	
1110	LOCAL OSCILLATOR CHANNEL 7	15922	19.28	
1112	LOCAL OSCILLATOR CHANNEL 8	17286	21.97	
1114	LOCAL OSCILLATOR CHANNEL 15	15717	18.61	
1116	PILLO #2	16778	20.87	
1118	PILLO #1	16507	20.47	
1120	1553 INTERFACE	16744	33.63	
1122	MIXER/IF AMPLIFIER CHANNEL 3	18044	23.22	
1124	MIXER/IF AMPLIFIER CHANNEL 4	30561	47.10	
1126	MIXER/IF AMPLIFIER CHANNEL 5	29853	46.07	
1128	MIXER/IF AMPLIFIER CHANNEL 6	30561	47.49	
1130	MIXER/IF AMPLIFIER CHANNEL 7	29853	46.65	
1132	MIXER/IF AMPLIFIER CHANNEL 8	16046	19.43	
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	16624	20.80	
1136	MIXER/IF AMPLIFIER CHANNEL 15	15923	19.48	
1138	IF AMPLIFIER CHANNEL 11 THRU 14	17287	21.81	
1140	IF AMPLIFIER CHANNEL 9	15715	18.86	
1142	IF AMPLIFIER CHANNEL 10	16779	21.04	
1144	IF AMPLIFIER CHANNEL 11	16504	19.62	
1146	DC/DC CONVERTER	16744	20.17	
1148	IF AMPLIFIER CHANNEL 13	18051	22.70	
1150	IF AMPLIFIER CHANNEL 14	18245	23.51	
1152	IF AMPLIFIER CHANNEL 12	18016	22.86	
1154	RF SHELF A1-1	20025	26.98	
1156	RF SHELF A1-2	16653	19.98	
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	30561	47.47	
1160	A1-1 WARM LOAD 1	29853	36.82	
1162	A1-1 WARM LOAD 2	30559	37.36	
1164	A1-1 WARM LOAD 3	29853	36.98	
1166	A1-1 WARM LOAD 4	16046	9.78	
1168	A1-1 WARM LOAD CENTER	16627	10.45	
1170	A1-2 WARM LOAD 1	15921	9.06	
1172	A1-2 WARM LOAD 2	17287	11.51	
1174	A1-2 WARM LOAD 3	15720	8.55	
1176	A1-2 WARM LOAD 4	16781	10.42	
1178	A1-2 WARM LOAD CENTER	16502	10.04	
1180	TEMP SENSOR REFERENCE VOLTAGE	16750		

## DESCRIPTION

## STATUS

ANTENNA IN FULL SCAN MODE	NO
ANTENNA IN WARM CAL MODE	NO
ANTENNA IN COLD CAL MODE	NO
ANTENNA IN NADIR MODE	NO
COLD CAL. POSITION LSB	ZERO
COLD CAL. POSITION MSB	ZERO
PLO REDUNDANCY	PLO # 1
SCANNER A1-1 POWER	ON
SCANNER A1-2 POWER	ON
PLO #1 LOCK	YES
PLO #2 LOCK	OFF
ADC LATCHUP FLAG	ONE

## ENGINEERING DATA

DESCRIPTION	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	22.2
A1-1 RF SHELF TEMPERATURE #1	27.8
A1-1 WARM LOAD TEMPERATURE	22.8
A1-2 SCANNER MOTOR TEMPERATURE	24.3
A1-2 RF SHELF TEMPERATURE #1	31.3
A1-2 WARM LOAD TEMPERATURE	24.5
A1-1 RF SHELF TEMPERATURE #2	27.6
A1-2 RF SHELF TEMPERATURE #2	31.0

VALUE MA/VOLTS

SIGNAL PROCESSOR	+5 VDC	18044	5.7
	+15 VDC	18248	16.0
	-15 VDC	18017	-12.9
SCAN DRIVE	+5 VDC	19996	5.3
	+15 VDC	16650	16.5
	-15 VDC	30561	-19.9
PLO	+15 VDC	29853	12.8
	-15 VDC	30561	-19.9
RECEIVER	+8 VDC	29853	6.2
MIXER/IF AMPLIFIER A1-1	+10 VDC	16047	11.2
A1-2	+10 VDC	16620	11.1
LO CHANNEL 6	+10 VDC	15921	11.3
7	+10 VDC	17289	11.0
SPARE		15718	190.2
LO CHANNEL 3	+10 VDC	16775	11.1
4	+10 VDC	16499	11.2
5	+10 VDC	16743	11.1
8	+10 VDC	18044	10.8
15	+15 VDC	18229	16.0
QUIET BUS CURRENT		18009	2420.7
A1-1 NOISY POWER BUS CURRENT		20022	51.8
A1-2 NOISY POWER BUS CURRENT		16651	43.0

## PRT TEMPERATURES

## VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

## FIXED TARGET

## BASEPLATE

## THERMOCOUPLE TEMPERATURES

## FIXED TARGET SHROUD

## VARIABLE TARGET SHROUD

## FIXED TARGET N2

## VARIABLE TARGET N2

## HEATER N2

## FIXED TARGET FLOW METER

## VARIABLE TARGET FLOW METER

## BASEPLATE HEATER N2

## BASEPLATE N2

## BASEPLATE FLOW METER

## ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00

EOS A1-03 E1.EXE:40 GSE MODE 3 8 SEC P1 17-NOV-98 10:09:42 SCAN NUMBER 229  
[ 5 ] SCIENCE DATA ELEMENT 0000

[ 6 ] CONTROL/STATUS ELEMENT 00

[ 7 ] ENGINEERING ELEMENT 00

COMMANDS

		PILO POWER =	PILO#1 [ 15 ]
[ 9 ]	SCANNER A1-1 POWER =	ON	COLD CAL POSITION 1 = YES [ 16 ]
[ 10 ]	SCANNER A1-2 POWER =	ON	2 = NO [ 17 ]
[ 11 ]	ANTENNA FULL SCAN MODE =	NO	3 = NO [ 18 ]
[ 12 ]	WARM CAL =	NO	COLD CAL POSITION 4 = NO [ 19 ]
[ 13 ]	COLD CAL =	NO	RESET C&DH PROCESSOR [ 20 ]
[ 14 ]	NADIR =	NO	GSE MODE [ 21 ]

ENGR OK POWER ON CHECKSUM IN F25D CALC F25D SA28 229 SA29 409  
SCREEN ONLY [ 2 ] PRINT [ 3 ] FULL [ 1 ] RETURN  
SELECT BUTTON 3

GSE MODE 3

R. P. S.

11/17/98

P. 3.3.6.6

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	GSE #3 SAMPLE 17	16789
2		00000011	574	CH 8	16506
3	PACKET LENGTH	00000010	576	CH 9	16737
4		10111111	578	CH 10	18077
5	UNIT SERIAL NUMBER	00000011	580	CH 11	18241
6		01100000	582	CH 12	18017
7	INSTRUMENT MODE/STATUS	10011010	584	CH 13	20008
8		00000000	586	CH 14	16651
10	REFLECTOR 1 POSITION 1	14974	588	CH 15	14974
12	REFLECTOR 2 POSITION 1	14621	590	REFLECTOR 1 POSITION 18	14621
14	REFL 1 POS 1 2ND LOOK	14974	592	REFLECTOR 2 POSITION 18	14621
16	REFL 2 POS 1 2ND LOOK	14621	594	REFL 1 POS 18 2ND LOOK	14974
18	GSE #3 SAMPLE 1	16068	596	REFL 2 POS 18 2ND LOOK	14621
20	CH 3	16639	598	GSE #3 SAMPLE 18	16062
22	CH 4	15936	600	CH 3	16636
24	CH 5	17280	602	CH 4	15938
26	CH 6	15710	604	CH 5	17283
28	CH 7	16786	606	CH 6	15707
30	CH 8	16503	608	CH 7	16789
32	CH 9	16738	610	CH 8	16507
34	CH 10	18075	612	CH 9	16737
36	CH 11	18252	614	CH 10	18081
38	CH 12	18024	616	CH 11	18252
40	CH 13	20048	618	CH 12	18033
42	CH 14	16651	620	CH 13	20039
44	CH 15	14974	622	CH 14	16652
46	REFLECTOR 1 POSITION 2	14621	624	REFLECTOR 1 POSITION 19	14974
48	REFLECTOR 2 POSITION 2	14974	626	REFLECTOR 2 POSITION 19	14621
50	REFL 1 POS 2 2ND LOOK	14621	628	REFL 1 POS 19 2ND LOOK	14974
52	REFL 2 POS 2 2ND LOOK	16064	630	REFL 2 POS 19 2ND LOOK	14621
54	GSE #3 SAMPLE 2	16640	632	GSE #3 SAMPLE 19	16058
56	CH 3	15941	634	CH 3	16638
58	CH 4	17283	636	CH 4	15940
60	CH 5	15707	638	CH 5	17282
62	CH 6	16794	640	CH 6	15709
64	CH 7	16505	642	CH 7	16792
66	CH 8	16732	644	CH 8	16505
68	CH 9	18075	646	CH 9	16738
70	CH 10	18251	648	CH 10	18073
72	CH 11	18017	650	CH 11	18247
74	CH 12	20042	652	CH 12	18020
76	CH 13	16651	654	CH 13	20031
78	CH 14	14974	656	CH 14	16650
80	CH 15	14622	658	REFLECTOR 1 POSITION 20	14974
82	REFLECTOR 2 POSITION 3	14974	660	REFLECTOR 2 POSITION 20	14621
84	REFL 1 POS 3 2ND LOOK	14621	662	REFL 1 POS 20 2ND LOOK	14974
86	REFL 2 POS 3 2ND LOOK	16066	664	REFL 2 POS 20 2ND LOOK	14621
88	GSE #3 SAMPLE 3	16638	666	GSE #3 SAMPLE 20	16060
90	CH 3	15938	668	CH 3	16639
	CH 4	17282	670	CH 4	15938
	CH 5			CH 5	17280
	CH 6			CH 6	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15714	672	CH 7	15710
96	CH 8	16792	674	CH 8	16790
98	CH 9	16505	676	CH 9	16504
100	CH 10	16733	678	CH 10	16731
102	CH 11	18077	680	CH 11	18074
104	CH 12	18248	682	CH 12	18250
106	CH 13	18023	684	CH 13	18019
108	CH 14	20057	686	CH 14	20049
110	CH 15	16651	688	CH 15	16651
112	REFLECTOR 1 POSITION 4	14974	690	REFLECTOR 1 POSITION 21	14974
114	REFLECTOR 2 POSITION 4	14622	692	REFLECTOR 2 POSITION 21	14621
116	REFL 1 POS 4 2ND LOOK	14974	694	REFL 1 POS 21 2ND LOOK	14974
118	REFL 2 POS 4 2ND LOOK	14621	696	REFL 2 POS 21 2ND LOOK	14621
120	GSE #3 SAMPLE 4	16064	698	GSE #3 SAMPLE 21	16061
122	CH 3	16641	700	CH 3	16636
124	CH 4	15938	702	CH 4	15932
126	CH 5	17280	704	CH 5	17279
128	CH 6	15707	706	CH 6	15707
130	CH 7	16794	708	CH 7	16792
132	CH 8	16503	710	CH 8	16508
134	CH 9	16734	712	CH 9	16729
136	CH 10	18073	714	CH 10	18074
138	CH 11	18242	716	CH 11	18247
140	CH 12	18018	718	CH 12	18025
142	CH 13	20040	720	CH 13	20041
144	CH 14	16652	722	CH 14	16651
146	CH 15	14974	724	CH 15	14974
148	REFLECTOR 1 POSITION 5	14621	726	REFLECTOR 1 POSITION 22	14621
150	REFLECTOR 2 POSITION 5	14974	728	REFLECTOR 2 POSITION 22	14974
152	REFL 1 POS 5 2ND LOOK	14621	730	REFL 1 POS 22 2ND LOOK	14621
154	REFL 2 POS 5 2ND LOOK	16067	732	REFL 2 POS 22 2ND LOOK	16063
156	GSE #3 SAMPLE 5	16639	734	GSE #3 SAMPLE 22	16635
158	CH 3	15939	736	CH 3	15943
160	CH 4	17285	738	CH 4	17283
162	CH 5	15709	740	CH 5	15710
164	CH 6	16788	742	CH 6	16790
166	CH 7	16508	744	CH 7	16509
168	CH 8	16737	746	CH 8	16734
170	CH 9	18078	748	CH 9	18081
172	CH 10	18257	750	CH 10	18257
174	CH 11	18031	752	CH 11	18036
176	CH 12	20046	754	CH 12	20040
178	CH 13	16653	756	CH 13	16651
180	CH 14	14974	758	CH 14	14974
182	CH 15	14621	760	CH 15	14621
184	REFLECTOR 1 POSITION 6	14974	762	REFLECTOR 1 POSITION 23	14974
186	REFL 1 POS 6 2ND LOOK	14621	764	REFL 1 POS 23 2ND LOOK	14621
188	REFL 2 POS 6 2ND LOOK	16057	766	REFL 2 POS 23 2ND LOOK	16058
190	GSE #3 SAMPLE 6	16640	768	GSE #3 SAMPLE 23	16637
192	CH 3	15937	770	CH 3	15937



ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17280	772	CH 6	17281
196	CH 7	15711	774	CH 7	15709
198	CH 8	16791	776	CH 8	16788
200	CH 9	16505	778	CH 9	16507
202	CH 10	16736	780	CH 10	16733
204	CH 11	18079	782	CH 11	18071
206	CH 12	18244	784	CH 12	18249
208	CH 13	18020	786	CH 13	18023
210	CH 14	20027	788	CH 14	20040
212	CH 15	16649	790	CH 15	16650
214	REFLECTOR 1 POSITION 7	14974	792	REFLECTOR 1 POSITION 24	14974
216	REFLECTOR 2 POSITION 7	14621	794	REFLECTOR 2 POSITION 24	14621
218	REFL 1 POS 7 2ND LOOK	14974	796	REFL 1 POS 24 2ND LOOK	14974
220	REFL 2 POS 7 2ND LOOK	14621	798	REFL 2 POS 24 2ND LOOK	14621
222	GSE #3 SAMPLE 7	16064	800	GSE #3 SAMPLE 24	16065
224	CH 3	16639	802	CH 3	16637
226	CH 4	15939	804	CH 4	15941
228	CH 5	17281	806	CH 5	17281
230	CH 6	15711	808	CH 6	15710
232	CH 7	16794	810	CH 7	16791
234	CH 8	16502	812	CH 8	16505
236	CH 9	16730	814	CH 9	16730
238	CH 10	18073	816	CH 10	18075
240	CH 11	18248	818	CH 11	18252
242	CH 12	18019	820	CH 12	18027
244	CH 13	20041	822	CH 13	20040
246	CH 14	16651	824	CH 14	16651
248	CH 15	14974	826	CH 15	14974
250	REFLECTOR 1 POSITION 8	14621	828	REFLECTOR 1 POSITION 25	14621
252	REFLECTOR 2 POSITION 8	14974	830	REFLECTOR 2 POSITION 25	14621
254	REFL 1 POS 8 2ND LOOK	14621	832	REFL 1 POS 25 2ND LOOK	14974
256	REFL 2 POS 8 2ND LOOK	16064	834	REFL 2 POS 25 2ND LOOK	14621
258	GSE #3 SAMPLE 8	16637	836	GSE #3 SAMPLE 25	16062
260	CH 3	15938	838	CH 3	16636
262	CH 4	17280	840	CH 4	15937
264	CH 5	15708	842	CH 5	17282
266	CH 6	16789	844	CH 6	15710
268	CH 7	16502	846	CH 7	16790
270	CH 8	16730	848	CH 8	16506
272	CH 9	18071	850	CH 9	16730
274	CH 10	18249	852	CH 10	18076
276	CH 11	18033	854	CH 11	18245
278	CH 12	20044	856	CH 12	18023
280	CH 13	16651	858	CH 13	20036
282	CH 14	14974	860	CH 14	16653
284	CH 15	14621	862	CH 15	14974
286	REFLECTOR 1 POSITION 9	14621	864	REFLECTOR 1 POSITION 26	14621
288	REFLECTOR 2 POSITION 9	14974	866	REFLECTOR 2 POSITION 26	14974
290	REFL 1 POS 9 2ND LOOK	14621	868	REFL 1 POS 26 2ND LOOK	14621
292	REFL 2 POS 9 2ND LOOK	16066	870	REFL 2 POS 26 2ND LOOK	16060
	GSE #3 SAMPLE 9	16637		GSE #3 SAMPLE 26	16636

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15936	872	CH 5	15940
296	CH 6	17282	874	CH 6	17282
298	CH 7	15710	876	CH 7	15712
300	CH 8	16794	878	CH 8	16792
302	CH 9	16507	880	CH 9	16507
304	CH 10	16731	882	CH 10	16741
306	CH 11	18074	884	CH 11	18077
308	CH 12	18249	886	CH 12	18247
310	CH 13	18021	888	CH 13	18020
312	CH 14	20035	890	CH 14	20042
314	CH 15	16651	892	CH 15	16652
316	REFLECTOR 1 POSITION 10	14974	894	REFLECTOR 1 POSITION 27	14974
318	REFLECTOR 2 POSITION 10	14621	896	REFLECTOR 2 POSITION 27	14621
320	REFL 1 POS 10 2ND LOOK	14974	898	REFL 1 POS 27 2ND LOOK	14974
322	REFL 2 POS 10 2ND LOOK	14621	900	REFL 2 POS 27 2ND LOOK	14621
324	GSE #3 SAMPLE 10	16066	902	GSE #3 SAMPLE 27	16064
326	CH 3	16639	904	CH 3	16638
328	CH 4	15940	906	CH 4	15939
330	CH 5	17283	908	CH 5	17284
332	CH 6	15712	910	CH 6	15709
334	CH 7	16792	912	CH 7	16793
336	CH 8	16505	914	CH 8	16506
338	CH 9	16737	916	CH 9	16735
340	CH 10	18077	918	CH 10	18076
342	CH 11	18254	920	CH 11	18255
344	CH 12	18033	922	CH 12	18029
346	CH 13	20031	924	CH 13	20028
348	CH 14	16651	926	CH 14	16652
350	CH 15	14974	928	CH 15	14974
352	REFLECTOR 1 POSITION 11	14621	930	REFLECTOR 1 POSITION 28	14621
354	REFLECTOR 2 POSITION 11	14974	932	REFLECTOR 2 POSITION 28	14974
356	REFL 1 POS 11 2ND LOOK	14621	934	REFL 1 POS 28 2ND LOOK	14621
358	REFL 2 POS 11 2ND LOOK	16061	936	REFL 2 POS 28 2ND LOOK	16060
360	GSE #3 SAMPLE 11	16641	938	GSE #3 SAMPLE 28	16637
362	CH 3	15936	940	CH 3	15938
364	CH 4	17280	942	CH 4	17281
366	CH 5	15710	944	CH 5	15709
368	CH 6	16792	946	CH 6	16790
370	CH 7	16501	948	CH 7	16506
372	CH 8	16736	950	CH 8	16736
374	CH 9	18074	952	CH 9	18078
376	CH 10	18256	954	CH 10	18254
378	CH 11	18021	956	CH 11	18030
380	CH 12	20047	958	CH 12	20040
382	CH 13	16652	960	CH 13	16653
384	CH 14	14974	962	CH 14	14974
386	CH 15	14621	964	CH 15	14621
388	REFLECTOR 1 POSITION 12	14974	966	REFLECTOR 1 POSITION 29	14974
390	REFLECTOR 2 POSITION 12	14621	968	REFLECTOR 2 POSITION 29	14621
392	REFL 1 POS 12 2ND LOOK	16057	970	REFL 1 POS 29 2ND LOOK	16061
	REFL 2 POS 12 2ND LOOK			REFL 2 POS 29 2ND LOOK	
	GSE #3 SAMPLE 12			GSE #3 SAMPLE 29	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16637	972	REFLECTOR 1 POSITION 30	14974
396	CH 5	15936	974	REFLECTOR 2 POSITION 30	14621
398	CH 6	17281	976	REFL 1 POS 30 2ND LOOK	14974
400	CH 7	15711	978	REFL 2 POS 30 2ND LOOK	14621
402	CH 8	16786	980	GSE #3 SAMPLE 30	16065
404	CH 9	16508	982		16641
406	CH 10	16732	984		15940
408	CH 11	18076	986		17283
410	CH 12	18258	988		15708
412	CH 13	18028	990		16792
414	CH 14	20042	992		16510
416	CH 15	16652	994		16733
418	REFLECTOR 1 POSITION 13	14974	996		18072
420	REFLECTOR 2 POSITION 13	14621	998		18253
422	REFL 1 POS 13 2ND LOOK	14974	1000		18017
424	REFL 2 POS 13 2ND LOOK	14621	1002		20007
426	GSE #3 SAMPLE 13	16062	1004		16653
428	CH 3	16640	1006		OE
430	CH 4	15937	1008		OE
432	CH 5	17282	1010		OE
434	CH 6	15711	1012		
436	CH 7	16791	1014		
438	CH 8	16505	1016		
440	CH 9	16732	1018		
442	CH 10	18075	1020		
444	CH 11	18255	1022		
446	CH 12	18014	1024		
448	CH 13	20031	1026		
450	CH 14	16651	1028		
452	CH 15	14974	1030		
454	REFLECTOR 1 POSITION 14	14621	1032		
456	REFL 1 POS 14 2ND LOOK	14974	1034		
458	REFL 2 POS 14 2ND LOOK	14621	1036		
460	GSE #3 SAMPLE 14	16062	1038		
462	CH 3	16641	1040		
464	CH 4	15936	1042		
466	CH 5	17281	1044		
468	CH 6	15711	1046		
470	CH 7	16791	1048		
472	CH 8	16504	1050		
474	CH 9	16732	1052		
476	CH 10	18076	1054		
478	CH 11	18255	1056		
480	CH 12	18023	1058		
482	CH 13	20041	1060		
484	CH 14	16651	1062		
486	CH 15	14974	1064		
488	REFLECTOR 1 POSITION 15	14621	1066		
490	REFLECTOR 2 POSITION 15	14974	1068		
492	REFL 1 POS 15 2ND LOOK	14621	1070		
	REFL 2 POS 15 2ND LOOK				

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	GSE #3 SAMPLE 15	CH 3	16064	1072	CH 7
496		CH 4	16638	1074	CH 8
498		CH 5	15942	1076	CH 9
500		CH 6	17280	1078	CH 10
502		CH 7	15708	1080	CH 11
504		CH 8	16790	1082	CH 12
506		CH 9	16506	1084	CH 13
508		CH 10	16738	1086	CH 14
510		CH 11	18077	1088	CH 15
512		CH 12	18251	1182	REFLECTOR 1 WARM CAL POS
514		CH 13	18027	1184	REFLECTOR 2 WARM CAL POS
516		CH 14	20031	1186	REFL 1 WARM CAL 2ND LOOK
518		CH 15	16650	1188	REFL 2 WARM CAL 2ND LOOK
520	REFLECTOR 1 POSITION 16	CH 16	14974	1190	WARM CAL DATA 1
522	REFLECTOR 2 POSITION 16	CH 17	14621	1192	CH 3
524	REFL 1 POS 16 2ND LOOK	CH 18	14974	1194	CH 4
526	REFL 2 POS 16 2ND LOOK	CH 19	14621	1196	CH 5
528	GSE #3 SAMPLE 16	CH 20	16063	1198	CH 6
530		CH 21	16637	1200	CH 7
532		CH 22	15937	1202	CH 8
534		CH 23	17282	1204	CH 9
536		CH 24	15710	1206	CH 10
538		CH 25	16792	1208	CH 11
540		CH 26	16508	1210	CH 12
542		CH 27	16731	1212	CH 13
544		CH 28	18074	1214	CH 14
546		CH 29	18249	1216	CH 15
548		CH 30	18026	1218	CH 3
550		CH 31	20033	1220	CH 4
552		CH 32	16652	1222	CH 5
554	REFLECTOR 1 POSITION 17	CH 33	14974	1224	CH 6
556	REFLECTOR 2 POSITION 17	CH 34	14621	1226	CH 7
558	REFL 1 POS 17 2ND LOOK	CH 35	14974	1228	CH 8
560	REFL 2 POS 17 2ND LOOK	CH 36	14621	1230	CH 9
562	GSE #3 SAMPLE 17	CH 37	16058	1232	CH 10
564		CH 38	16639	1234	CH 11
566		CH 39	15937	1236	CH 12
568		CH 40	17277	1238	CH 13
570		CH 41	15708	1240	CH 14
					CH 15
					CH 16
					CH 17
					CH 18
					CH 19
					CH 20
					CH 21
					CH 22
					CH 23
					CH 24
					CH 25
					CH 26
					CH 27
					CH 28
					CH 29
					CH 30
					CH 31
					CH 32
					CH 33
					CH 34
					CH 35
					CH 36
					CH 37
					CH 38
					CH 39
					CH 40
					CH 41
					CH 42
					CH 43
					CH 44
					CH 45
					CH 46
					CH 47
					CH 48
					CH 49
					CH 50
					CH 51
					CH 52
					CH 53
					CH 54
					CH 55
					CH 56
					CH 57
					CH 58
					CH 59
					CH 60
					CH 61
					CH 62
					CH 63
					CH 64
					CH 65
					CH 66
					CH 67
					CH 68
					CH 69
					CH 70
					CH 71
					CH 72
					CH 73
					CH 74
					CH 75
					CH 76
					CH 77
					CH 78
					CH 79
					CH 80
					CH 81
					CH 82
					CH 83
					CH 84
					CH 85
					CH 86
					CH 87
					CH 88
					CH 89
					CH 90
					CH 91
					CH 92
					CH 93
					CH 94
					CH 95
					CH 96
					CH 97
					CH 98
					CH 99
					CH 100
					CH 101
					CH 102
					CH 103
					CH 104
					CH 105
					CH 106
					CH 107
					CH 108
					CH 109
					CH 110
					CH 111
					CH 112
					CH 113
					CH 114
					CH 115
					CH 116
					CH 117
					CH 118
					CH 119
					CH 120
					CH 121
					CH 122
					CH 123
					CH 124
					CH 125
					CH 126
					CH 127
					CH 128
					CH 129
					CH 130
					CH 131
					CH 132
					CH 133
					CH 134
					CH 135
					CH 136
					CH 137
					CH 138
					CH 139
					CH 140
					CH 141
					CH 142
					CH 143
					CH 144
					CH 145
					CH 146
					CH 147
					CH 148
					CH 149
					CH 150
					CH 151
					CH 152
					CH 153
					CH 154
					CH 155
					CH 156
					CH 157
					CH 158
					CH 159
					CH 160
					CH 161
					CH 162
					CH 163
					CH 164
					CH 165
					CH 166
					CH 167
					CH 168
					CH 169
					CH 170
					CH 171
					CH 172
					CH 173
					CH 174
					CH 175
					CH 176
					CH 177
					CH 178
					CH 179
					CH 180
					CH 181
					CH 182
					CH 183
					CH 184
					CH 185
					CH 186
					CH 187
					CH 188
					CH 189
					CH 190
					CH 191
					CH 192
					CH 193
					CH 194
					CH 195
					CH 196
					CH 197
					CH 198
					CH 199
					CH 200
					CH 201
					CH 202
					CH 203
					CH 204
					CH 205
					CH 206
					CH 207
					CH 208
					CH 209
					CH 210
					CH 211
					CH 212
					CH 213
					CH 214
					CH 215
					CH 216
					CH 217
					CH 218
					CH 219
					CH 220
					CH 221
					CH 222
					CH 223
					CH 224
					CH 225
					CH 226
					CH 227
					CH 228
					CH 229
					CH 230
					CH 231
					CH 232
					CH 233
					CH 234
					CH 235
					CH 236
					CH 237
					CH 238
					CH 239
					CH 240
					CH 241
					CH 242
					CH 243
					CH 244
					CH 245
					CH 246
					CH 247
					CH 248
					CH 249
					CH 250
					CH 251
					CH 252
					CH 253
					CH 254
					CH 255
					CH 256
					CH 257
					CH 258
					CH 259
					CH 260
					CH 261
					CH 262
					CH 263
					CH 264
					CH 265
					CH 266
					CH 267
					CH 268
					CH 269
					CH 270
					CH 271
					CH 272
					CH 273
					CH 274
					CH 275
					CH 276
					CH 277
					CH 278
					CH 279
					CH 280
					CH 281
					CH 282
					CH 283
					CH 284
					CH 285
					CH 286
					CH 287
					CH 288
					CH 289
					CH 290
					CH 291
					CH 292
					CH 293
					CH 294
					CH 295
					CH 296
					CH 297
					CH 298
					CH 299
					CH 300
					CH 301
					CH 302
					CH 303
					CH 304
					CH 305
					CH 306
					CH 307
					CH 308
					CH 30

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	17787	22.53
1092	SCAN MOTOR A1-2	18890	23.92
1094	FEED HORN A1-1	19428	25.99
1096	FEED HORN A1-2	20361	27.81
1098	RF MUX A1-1	21005	28.85
1100	RF MUX A1-2	22068	31.01
1102	LOCAL OSCILLATOR CHANNEL 3	22947	32.93
1104	LOCAL OSCILLATOR CHANNEL 4	23354	33.03
1106	LOCAL OSCILLATOR CHANNEL 5	22314	31.68
1108	LOCAL OSCILLATOR CHANNEL 6	21513	29.20
1110	LOCAL OSCILLATOR CHANNEL 7	21647	30.17
1112	LOCAL OSCILLATOR CHANNEL 8	22807	32.45
1114	LOCAL OSCILLATOR CHANNEL 15	22670	31.77
1116	PLLO #2	20894	28.66
1118	PLLO #1	23790	34.29
1120	1553 INTERFACE	16923	33.98
1122	MIXER/IF AMPLIFIER CHANNEL 3	22339	31.45
1124	MIXER/IF AMPLIFIER CHANNEL 4	22507	31.33
1126	MIXER/IF AMPLIFIER CHANNEL 5	22183	31.11
1128	MIXER/IF AMPLIFIER CHANNEL 6	21283	29.39
1130	MIXER/IF AMPLIFIER CHANNEL 7	21223	29.83
1132	MIXER/IF AMPLIFIER CHANNEL 8	22418	31.50
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	20775	28.64
1136	MIXER/IF AMPLIFIER CHANNEL 15	22436	31.84
1138	IF AMPLIFIER CHANNEL 11 THRU 14	22195	30.91
1140	IF AMPLIFIER CHANNEL 9	22363	30.56
1142	IF AMPLIFIER CHANNEL 10	22223	31.39
1144	IF AMPLIFIER CHANNEL 11	21442	29.01
1146	DC/DC CONVERTER	24081	34.13
1148	IF AMPLIFIER CHANNEL 13	21042	28.37
1150	IF AMPLIFIER CHANNEL 14	21398	29.50
1152	IF AMPLIFIER CHANNEL 12	21197	28.90
1154	RF SHELF A1-1	21696	30.17
1156	RF SHELF A1-2	22208	30.52
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	19786	26.54
1160	A1-1 WARM LOAD 1	23144	23.30
1162	A1-1 WARM LOAD 2	23637	23.41
1164	A1-1 WARM LOAD 3	23139	23.44
1166	A1-1 WARM LOAD 4	23219	23.42
1168	A1-1 WARM LOAD CENTER	23417	23.43
1170	A1-2 WARM LOAD 1	24216	24.88
1172	A1-2 WARM LOAD 2	24270	24.89
1174	A1-2 WARM LOAD 3	24285	24.89
1176	A1-2 WARM LOAD 4	24275	24.77
1178	A1-2 WARM LOAD CENTER	24281	24.88
1180	TEMP SENSOR REFERENCE VOLTAGE	25266	

## DESCRIPTION

## STATUS

ANTENNA IN FULL SCAN MODE	NO
ANTENNA IN WARM CAL MODE	NO
ANTENNA IN COLD CAL MODE	NO
ANTENNA IN NADIR MODE	NO
COLD CAL. POSITION LSB	ZERO
COLD CAL. POSITION MSB	ZERO
PLO REDUNDANCY	PLLO # 1
SCANNER A1-1 POWER	ON
SCANNER A1-2 POWER	ON
PLLO #1 LOCK	YES
PLLO #2 LOCK	OFF
ADC LATCHUP FLAG	ONE

## ENGINEERING DATA

DESCRIPTION	VALUE	MA/VOLTS	DEG C
ENGINEERING DATA			
A1-1 SCANNER MOTOR TEMPERATURE			22.2
A1-1 RF SHELF TEMPERATURE #1			27.5
A1-1 WARM LOAD TEMPERATURE			22.7
A1-2 SCANNER MOTOR TEMPERATURE			24.2
A1-2 RF SHELF TEMPERATURE #1			30.9
A1-2 WARM LOAD TEMPERATURE			24.4
A1-1 RF SHELF TEMPERATURE #2			27.4
A1-2 RF SHELF TEMPERATURE #2			30.6
DESCRIPTION			
SIGNAL PROCESSOR	+5 VDC	22035	4.9
	+15 VDC	21818	15.1
	-15 VDC	21798	-15.0
SCAN DRIVE	+5 VDC	22169	4.9
	+15 VDC	22124	14.9
	-15 VDC	21873	-15.1
PLO	+15 VDC	22567	14.8
	-15 VDC	22074	-15.2
RECEIVER	+8 VDC	21820	7.9
MIXER/IF AMPLIFIER A1-1	+10 VDC	21418	10.0
A1-2	+10 VDC	21430	10.0
LO CHANNEL 6	+10 VDC	21397	10.0
7	+10 VDC	21448	10.0
SPARE		32767	327.7
LO CHANNEL 3	+10 VDC	21241	10.1
4	+10 VDC	21179	10.1
5	+10 VDC	21400	10.0
8	+10 VDC	21305	10.0
15	+15 VDC	22012	15.0
QUIET BUS CURRENT		15947	2187.4
A1-1 NOISY POWER BUS CURRENT		399	1.6
A1-2 NOISY POWER BUS CURRENT		356	1.4

PRT TEMPERATURES

VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

FIXED TARGET

BASEPLATE

THERMOCOUPLE TEMPERATURES

FIXED TARGET SHROUD

VARIABLE TARGET SHROUD

FIXED TARGET N2

VARIABLE TARGET N2

HEATER N2

FIXED TARGET FLOW METER

VARIABLE TARGET FLOW METER

BASEPLATE HEATER N2

BASEPLATE N2

BASEPLATE FLOW METER

ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00

EOS A1-03 E1.EXE:40 GSE MODE 2 BP 1 P1 17-NOV-98 10:06:06 SCAN NUMBER 202  
[ 5 ] SCIENCE DATA ELEMENT 0000

[ 6 ] CONTROL/STATUS ELEMENT 00

[ 7 ] ENGINEERING ELEMENT 00

COMMANDS

		PILO POWER =	PILO#1 [ 15 ]
[ 9 ]	SCANNER A1-1 POWER =	ON	COLD CAL POSITION 1 = YES [ 16 ]
[ 10 ]	SCANNER A1-2 POWER =	ON	2 = NO [ 17 ]
[ 11 ]	ANTENNA FULL SCAN MODE =	NO	3 = NO [ 18 ]
[ 12 ]	WARM CAL =	NO	COLD CAL POSITION 4 = NO [ 19 ]
[ 13 ]	COLD CAL =	NO	RESET C&DH PROCESSOR [ 20 ]
[ 14 ]	NADIR =	NO	GSE MODE [ 21 ]

ENGR OK POWER ON CHECKSUM IN 880F CALC 880F SA28 202 SA29 355  
SCREEN ONLY [ 2 ] PRINT [ 3 ] FULL [ 1 ] RETURN  
SELECT BUTTON 3

GSE mode 2  
R. Heid  
11/12/98  
P. 3.3.6.6



ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	GSE #2 SAMPLE 17 CH 8	16806
2		00000011	574	CH 9	16490
3	PACKET LENGTH	00000010	576	CH 10	16719
4		10111111	578	CH 11	18085
5	UNIT SERIAL NUMBER	00000011	580	CH 12	18257
6		01000000	582	CH 13	18042
7	INSTRUMENT MODE/STATUS	10011010	584	CH 14	20062
8		00000000	586	CH 15	16646
10	REFLECTOR 1 POSITION 1	14519	588	REFLECTOR 1 POSITION 18	14519
12	REFLECTOR 2 POSITION 1	14164	590	REFLECTOR 2 POSITION 18	14164
14	REFL 1 POS 1 2ND LOOK	14519	592	REFL 1 POS 18 2ND LOOK	14519
16	REFL 2 POS 1 2ND LOOK	14164	594	REFL 2 POS 18 2ND LOOK	14164
18	GSE #2 SAMPLE 1 CH 3	16063	596	GSE #2 SAMPLE 18 CH 3	16070
20	CH 4	16660	598	CH 4	16663
22	CH 5	15955	600	CH 5	15956
24	CH 6	17259	602	CH 6	17263
26	CH 7	15706	604	CH 7	15704
28	CH 8	16807	606	CH 8	16814
30	CH 9	16487	608	CH 9	16489
32	CH 10	16723	610	CH 10	16725
34	CH 11	18079	612	CH 11	18077
36	CH 12	18271	614	CH 12	18270
38	CH 13	18030	616	CH 13	18043
40	CH 14	20081	618	CH 14	20063
42	CH 15	16646	620	CH 15	16646
44	REFLECTOR 1 POSITION 2	14519	622	REFLECTOR 1 POSITION 19	14519
46	REFLECTOR 2 POSITION 2	14164	624	REFLECTOR 2 POSITION 19	14164
48	REFL 1 POS 2 2ND LOOK	14519	626	REFL 1 POS 19 2ND LOOK	14519
50	REFL 2 POS 2 2ND LOOK	14164	628	REFL 2 POS 19 2ND LOOK	14164
52	GSE #2 SAMPLE 2 CH 3	16064	630	GSE #2 SAMPLE 19 CH 3	16068
54	CH 4	16660	632	CH 4	16662
56	CH 5	15955	634	CH 5	15957
58	CH 6	17263	636	CH 6	17261
60	CH 7	15706	638	CH 7	15703
62	CH 8	16810	640	CH 8	16809
64	CH 9	16489	642	CH 9	16491
66	CH 10	16724	644	CH 10	16726
68	CH 11	18089	646	CH 11	18081
70	CH 12	18264	648	CH 12	18264
72	CH 13	18046	650	CH 13	18028
74	CH 14	20074	652	CH 14	20078
76	CH 15	16645	654	CH 15	16645
78	REFLECTOR 1 POSITION 3	14519	656	REFLECTOR 1 POSITION 20	14519
80	REFLECTOR 2 POSITION 3	14164	658	REFLECTOR 2 POSITION 20	14164
82	REFL 1 POS 3 2ND LOOK	14519	660	REFL 1 POS 20 2ND LOOK	14519
84	REFL 2 POS 3 2ND LOOK	14164	662	REFL 2 POS 20 2ND LOOK	14164
86	GSE #2 SAMPLE 3 CH 3	16066	664	GSE #2 SAMPLE 20 CH 3	16067
88	CH 4	16660	666	CH 4	16663
90	CH 5	15955	668	CH 5	15962
92	CH 6	17262	670	CH 6	17264

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15703	672	CH 7	15703
96	CH 8	16805	674	CH 8	16808
98	CH 9	16489	676	CH 9	16487
100	CH 10	16723	678	CH 10	16727
102	CH 11	18075	680	CH 11	18076
104	CH 12	18266	682	CH 12	18267
106	CH 13	18042	684	CH 13	18037
108	CH 14	20065	686	CH 14	20069
110	CH 15	16646	688	CH 15	16646
112	REFLECTOR 1 POSITION 4	14519	690	REFLECTOR 1 POSITION 21	14519
114	REFLECTOR 2 POSITION 4	14164	692	REFLECTOR 2 POSITION 21	14164
116	REFL 1 POS 4 2ND LOOK	14519	694	REFL 1 POS 21 2ND LOOK	14519
118	REFL 2 POS 4 2ND LOOK	14164	696	REFL 2 POS 21 2ND LOOK	14164
120	GSE #2 SAMPLE 4	16061	698	GSE #2 SAMPLE 21	16065
122	CH 3	16661	700	CH 3	16664
124	CH 4	15952	702	CH 4	15957
126	CH 5	17262	704	CH 5	17262
128	CH 6	15703	706	CH 6	15704
130	CH 7	16803	708	CH 7	16805
132	CH 8	16490	710	CH 8	16491
134	CH 9	16722	712	CH 9	16720
136	CH 10	18075	714	CH 10	18081
138	CH 11	18266	716	CH 11	18270
140	CH 12	18043	718	CH 12	18034
142	CH 13	20066	720	CH 13	20037
144	CH 14	16648	722	CH 14	16647
146	CH 15	14519	724	CH 15	14519
148	REFLECTOR 1 POSITION 5	14164	726	REFLECTOR 1 POSITION 22	14164
150	REFLECTOR 2 POSITION 5	14519	728	REFLECTOR 2 POSITION 22	14519
152	REFL 1 POS 5 2ND LOOK	14164	730	REFL 1 POS 22 2ND LOOK	14164
154	REFL 2 POS 5 2ND LOOK	16065	732	REFL 2 POS 22 2ND LOOK	16063
156	GSE #2 SAMPLE 5	16662	734	GSE #2 SAMPLE 22	16660
158	CH 3	15954	736	CH 3	15958
160	CH 4	17263	738	CH 4	17262
162	CH 5	15702	740	CH 5	15701
164	CH 6	16807	742	CH 6	16805
166	CH 7	16491	744	CH 7	16487
168	CH 8	16723	746	CH 8	16728
170	CH 9	18085	748	CH 9	18081
172	CH 10	18257	750	CH 10	18263
174	CH 11	18033	752	CH 11	18041
176	CH 12	20041	754	CH 12	20070
178	CH 13	16647	756	CH 13	16645
180	CH 14	14519	758	CH 14	14519
182	CH 15	14164	760	CH 15	14164
184	REFLECTOR 1 POSITION 6	14519	762	REFLECTOR 1 POSITION 23	14519
186	REFLECTOR 2 POSITION 6	14164	764	REFLECTOR 2 POSITION 23	14164
188	REFL 1 POS 6 2ND LOOK	14164	766	REFL 1 POS 23 2ND LOOK	16062
190	REFL 2 POS 6 2ND LOOK	16068	768	REFL 2 POS 23 2ND LOOK	16661
192	GSE #2 SAMPLE 6	15955	770	GSE #2 SAMPLE 23	15956

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17263	772	CH 6	17260
196	CH 7	15703	774	CH 7	15704
198	CH 8	16807	776	CH 8	16805
200	CH 9	16487	778	CH 9	16487
202	CH 10	16720	780	CH 10	16724
204	CH 11	18079	782	CH 11	18073
206	CH 12	18266	784	CH 12	18260
208	CH 13	18046	786	CH 13	18033
210	CH 14	20074	788	CH 14	20065
212	CH 15	16646	790	CH 15	16645
214	REFLECTOR 1 POSITION 7	14519	792	REFLECTOR 1 POSITION 24	14519
216	REFLECTOR 2 POSITION 7	14164	794	REFLECTOR 2 POSITION 24	14164
218	REFL 1 POS 7 2ND LOOK	14519	796	REFL 1 POS 24 2ND LOOK	14519
220	REFL 2 POS 7 2ND LOOK	14164	798	REFL 2 POS 24 2ND LOOK	14164
222	GSE #2 SAMPLE 7	16068	800	GSE #2 SAMPLE 24	16063
224	CH 3	16660	802	CH 3	16663
226	CH 4	15957	804	CH 4	15960
228	CH 5	17262	806	CH 5	17260
230	CH 6	15704	808	CH 6	15704
232	CH 7	16810	810	CH 7	16808
234	CH 8	16490	812	CH 8	16489
236	CH 9	16722	814	CH 9	16729
238	CH 10	18078	816	CH 10	18084
240	CH 11	18267	818	CH 11	18261
242	CH 12	18044	820	CH 12	18036
244	CH 13	20080	822	CH 13	20040
246	CH 14	16647	824	CH 14	16648
248	CH 15	14519	826	CH 15	14519
250	REFLECTOR 1 POSITION 8	14164	828	REFLECTOR 1 POSITION 25	14164
252	REFLECTOR 2 POSITION 8	14519	830	REFLECTOR 2 POSITION 25	14519
254	REFL 1 POS 8 2ND LOOK	14164	832	REFL 1 POS 25 2ND LOOK	14164
256	REFL 2 POS 8 2ND LOOK	16068	834	REFL 2 POS 25 2ND LOOK	16061
258	GSE #2 SAMPLE 8	16660	836	GSE #2 SAMPLE 25	16661
260	CH 3	15958	838	CH 3	15959
262	CH 4	17260	840	CH 4	17263
264	CH 5	15704	842	CH 5	15702
266	CH 6	16802	844	CH 6	16809
268	CH 7	16490	846	CH 7	16491
270	CH 8	16717	848	CH 8	16721
272	CH 9	18071	850	CH 9	18077
274	CH 10	18261	852	CH 10	18269
276	CH 11	18052	854	CH 11	18053
278	CH 12	20075	856	CH 12	20034
280	CH 13	16647	858	CH 13	16648
282	CH 14	14519	860	CH 14	14519
284	CH 15	14164	862	CH 15	14164
286	REFLECTOR 1 POSITION 9	14519	864	REFLECTOR 1 POSITION 26	14519
288	REFLECTOR 2 POSITION 9	14164	866	REFLECTOR 2 POSITION 26	14164
290	REFL 1 POS 9 2ND LOOK	16063	868	REFL 1 POS 26 2ND LOOK	16065
292	REFL 2 POS 9 2ND LOOK	16659	870	REFL 2 POS 26 2ND LOOK	16661
	GSE #2 SAMPLE 9			GSE #2 SAMPLE 26	
	CH 3			CH 3	
	CH 4			CH 4	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15956	872	CH 5	15960
296	CH 6	17259	874	CH 6	17263
298	CH 7	15703	876	CH 7	15701
300	CH 8	16804	878	CH 8	16809
302	CH 9	16490	880	CH 9	16487
304	CH 10	16715	882	CH 10	16721
306	CH 11	18081	884	CH 11	18081
308	CH 12	18259	886	CH 12	18259
310	CH 13	18040	888	CH 13	18035
312	CH 14	20070	890	CH 14	20077
314	CH 15	16647	892	CH 15	16645
316	REFLECTOR 1 POSITION 10	14519	894	REFLECTOR 1 POSITION 27	14519
318	REFLECTOR 2 POSITION 10	14164	896	REFLECTOR 2 POSITION 27	14164
320	REFL 1 POS 10 2ND LOOK	14519	898	REFL 1 POS 27 2ND LOOK	14519
322	REFL 2 POS 10 2ND LOOK	14164	900	REFL 2 POS 27 2ND LOOK	14164
324	GSE #2 SAMPLE 10 CH 3	16062	902	GSE #2 SAMPLE 27 CH 3	16058
326	CH 4	16659	904	CH 4	16662
328	CH 5	15955	906	CH 5	15957
330	CH 6	17263	908	CH 6	17262
332	CH 7	15706	910	CH 7	15702
334	CH 8	16807	912	CH 8	16808
336	CH 9	16488	914	CH 9	16493
338	CH 10	16729	916	CH 10	16724
340	CH 11	18082	918	CH 11	18083
342	CH 12	18262	920	CH 12	18259
344	CH 13	18059	922	CH 13	18037
346	CH 14	20048	924	CH 14	20040
348	CH 15	16646	926	CH 15	16645
350	REFLECTOR 1 POSITION 11	14519	928	REFLECTOR 1 POSITION 28	14519
352	REFLECTOR 2 POSITION 11	14164	930	REFLECTOR 2 POSITION 28	14164
354	REFL 1 POS 11 2ND LOOK	14519	932	REFL 1 POS 28 2ND LOOK	14519
356	REFL 2 POS 11 2ND LOOK	14164	934	REFL 2 POS 28 2ND LOOK	14164
358	GSE #2 SAMPLE 11 CH 3	16070	936	GSE #2 SAMPLE 28 CH 3	16061
360	CH 4	16662	938	CH 4	16659
362	CH 5	15956	940	CH 5	15955
364	CH 6	17264	942	CH 6	17263
366	CH 7	15701	944	CH 7	15702
368	CH 8	16811	946	CH 8	16806
370	CH 9	16488	948	CH 9	16487
372	CH 10	16725	950	CH 10	16730
374	CH 11	18072	952	CH 11	18073
376	CH 12	18261	954	CH 12	18267
378	CH 13	18036	956	CH 13	18038
380	CH 14	20070	958	CH 14	20057
382	CH 15	16646	960	CH 15	16646
384	REFLECTOR 1 POSITION 12	14519	962	REFLECTOR 1 POSITION 29	14519
386	REFLECTOR 2 POSITION 12	14164	964	REFLECTOR 2 POSITION 29	14164
388	REFL 1 POS 12 2ND LOOK	14519	966	REFL 1 POS 29 2ND LOOK	14519
390	REFL 2 POS 12 2ND LOOK	14164	968	REFL 2 POS 29 2ND LOOK	14164
392	GSE #2 SAMPLE 12 CH 3	16064	970	GSE #2 SAMPLE 29 CH 3	16066

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16660	972	CH 4	16664
396	CH 5	15957	974	CH 5	15956
398	CH 6	17261	976	CH 6	17262
400	CH 7	15704	978	CH 7	15705
402	CH 8	16807	980	CH 8	16810
404	CH 9	16492	982	CH 9	16490
406	CH 10	16722	984	CH 10	16720
408	CH 11	18076	986	CH 11	18081
410	CH 12	18264	988	CH 12	18260
412	CH 13	18047	990	CH 13	18049
414	CH 14	20026	992	CH 14	20062
416	CH 15	16647	994	CH 15	16645
418	REFLECTOR 1 POSITION 13	14519	996	REFLECTOR 1 POSITION 30	14519
420	REFLECTOR 2 POSITION 13	14164	998	REFLECTOR 2 POSITION 30	14164
422	REFL 1 POS 13 2ND LOOK	14519	1000	REFL 1 POS 30 2ND LOOK	14519
424	REFL 2 POS 13 2ND LOOK	14164	1002	REFL 2 POS 30 2ND LOOK	14164
426	GSE #2 SAMPLE 13	16062	1004	GSE #2 SAMPLE 30	16069
428	CH 3	16660	1006	CH 3	16662
430	CH 4	15954	1008	CH 4	15953
432	CH 5	17262	1010	CH 5	17263
434	CH 6	15704	1012	CH 6	15708
436	CH 7	16808	1014	CH 7	16806
438	CH 8	16489	1016	CH 8	16488
440	CH 9	16716	1018	CH 9	16723
442	CH 10	18075	1020	CH 10	18080
444	CH 11	18267	1022	CH 11	18270
446	CH 12	18021	1024	CH 12	18029
448	CH 13	20074	1026	CH 13	20058
450	CH 14	16646	1028	CH 14	16647
452	CH 15	14519	1030	CH 15	OE
454	REFLECTOR 1 POSITION 14	14164	1032	REFLECTOR 1 COLD CAL POS	OE
456	REFLECTOR 2 POSITION 14	14519	1034	REFLECTOR 2 COLD CAL POS	OE
458	REFL 1 POS 14 2ND LOOK	14164	1036	REFL 1 COLD CAL 2ND LOOK	OE
460	REFL 2 POS 14 2ND LOOK	16068	1038	REFL 2 COLD CAL 2ND LOOK	OE
462	GSE #2 SAMPLE 14	16659	1040	COLD CAL DATA 1	0
464	CH 3	15957	1042	CH 3	0
466	CH 4	17261	1044	CH 4	0
468	CH 5	15706	1046	CH 5	0
470	CH 6	16807	1048	CH 6	0
472	CH 7	16490	1050	CH 7	0
474	CH 8	16722	1052	CH 8	0
476	CH 9	18075	1054	CH 9	0
478	CH 10	18258	1056	CH 10	0
480	CH 11	18045	1058	CH 11	0
482	CH 12	20057	1060	CH 12	0
484	CH 13	16646	1062	CH 13	0
486	CH 14	14519	1064	CH 14	0
488	CH 15	14164	1066	CH 15	0
490	REFLECTOR 1 POSITION 15	14519	1068	REFLECTOR 1 COLD CAL DATA 2	0
492	REFLECTOR 2 POSITION 15	14164	1070	REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK	14519		REFL 1 COLD CAL 2ND LOOK	0
	REFL 2 POS 15 2ND LOOK	14164		REFL 2 COLD CAL 2ND LOOK	0



ELEMENT	DESCRIPTION	VALUE	TEMPERATURE	DEG C
1090	SCAN MOTOR A1-1	17777	22.51	
1092	SCAN MOTOR A1-2	18878	23.90	
1094	FEED HORN A1-1	19368	25.88	
1096	FEED HORN A1-2	20273	27.64	
1098	RF MUX A1-1	20910	28.66	
1100	RF MUX A1-2	21952	30.78	
1102	LOCAL OSCILLATOR CHANNEL 3	22828	32.70	
1104	LOCAL OSCILLATOR CHANNEL 4	23236	32.80	
1106	LOCAL OSCILLATOR CHANNEL 5	22209	31.48	
1108	LOCAL OSCILLATOR CHANNEL 6	21447	29.07	
1110	LOCAL OSCILLATOR CHANNEL 7	21550	29.98	
1112	LOCAL OSCILLATOR CHANNEL 8	22697	32.25	
1114	LOCAL OSCILLATOR CHANNEL 15	22557	31.55	
1116	PILO #2	20787	28.45	
1118	PILO #1	23667	34.05	
1120	1553 INTERFACE	16829	33.80	
1122	MIXER/IF AMPLIFIER CHANNEL 3	22222	31.22	
1124	MIXER/IF AMPLIFIER CHANNEL 4	22386	31.10	
1126	MIXER/IF AMPLIFIER CHANNEL 5	22063	30.88	
1128	MIXER/IF AMPLIFIER CHANNEL 6	21190	29.21	
1130	MIXER/IF AMPLIFIER CHANNEL 7	21122	29.64	
1132	MIXER/IF AMPLIFIER CHANNEL 8	22297	31.26	
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	20683	28.46	
1136	MIXER/IF AMPLIFIER CHANNEL 15	22329	31.63	
1138	IF AMPLIFIER CHANNEL 11 THRU 14	22084	30.68	
1140	IF AMPLIFIER CHANNEL 9	22250	30.28	
1142	IF AMPLIFIER CHANNEL 10	22111	31.17	
1144	IF AMPLIFIER CHANNEL 11	21356	28.85	
1146	DC/DC CONVERTER	23958	33.89	
1148	IF AMPLIFIER CHANNEL 13	20958	28.21	
1150	IF AMPLIFIER CHANNEL 14	21314	29.34	
1152	IF AMPLIFIER CHANNEL 12	21110	28.73	
1154	RF SHELF A1-1	21590	29.96	
1156	RF SHELF A1-2	22092	30.30	
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	19719	26.41	
1160	A1-1 WARM LOAD 1	23129	23.27	
1162	A1-1 WARM LOAD 2	23620	23.38	
1164	A1-1 WARM LOAD 3	23122	23.41	
1166	A1-1 WARM LOAD 4	23200	23.38	
1168	A1-1 WARM LOAD CENTER	23397	23.39	
1170	A1-2 WARM LOAD 1	24195	24.83	
1172	A1-2 WARM LOAD 2	24245	24.84	
1174	A1-2 WARM LOAD 3	24261	24.84	
1176	A1-2 WARM LOAD 4	24250	24.73	
1178	A1-2 WARM LOAD CENTER	24253	24.82	
1180	TEMP SENSOR REFERENCE VOLTAGE	25266		

## DESCRIPTION

## STATUS

ANTENNA IN FULL SCAN MODE	NO
ANTENNA IN WARM CAL MODE	NO
ANTENNA IN COLD CAL MODE	NO
ANTENNA IN NADIR MODE	NO
COLD CAL. POSITION LSB	ZERO
COLD CAL. POSITION MSB	ZERO
PLO REDUNDANCY	PLLO # 1
SCANNER A1-1 POWER	ON
SCANNER A1-2 POWER	ON
PLLO #1 LOCK	YES
PLLO #2 LOCK	OFF
ADC LATCHUP FLAG	ONE

## ENGINEERING DATA

DESCRIPTION	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	22.1
A1-1 RF SHELF TEMPERATURE #1	27.3
A1-1 WARM LOAD TEMPERATURE	22.7
A1-2 SCANNER MOTOR TEMPERATURE	24.2
A1-2 RF SHELF TEMPERATURE #1	30.7
A1-2 WARM LOAD TEMPERATURE	24.3
A1-1 RF SHELF TEMPERATURE #2	27.2
A1-2 RF SHELF TEMPERATURE #2	30.4
DESCRIPTION	MA/VOLTS
SIGNAL PROCESSOR	22053 4.9
+5 VDC	21819 15.1
+15 VDC	21796 -15.0
-15 VDC	22161 4.9
+5 VDC	22104 15.0
+15 VDC	21857 -15.0
-15 VDC	22574 14.8
+15 VDC	22077 -15.2
-15 VDC	21820 7.9
+8 VDC	21419 10.0
+10 VDC	21432 10.0
+10 VDC	21396 10.0
+10 VDC	21447 10.0
RECEIVER	32767 327.3
MIXER/IF AMPLIFIER A1-1	21246 10.1
A1-2	21175 10.1
LO CHANNEL 6	21402 10.0
7	21306 10.1
SPARE	22011 15.0
LO CHANNEL 3	15924 2193.0
4	155 7.0
5	134 6.7
8	
15	
QUIET BUS CURRENT	
A1-1 NOISY POWER BUS CURRENT	
A1-2 NOISY POWER BUS CURRENT	



EOS	A1-03	E1.EXE:40	GSE MODE 1	6-C-W	P1	17-NOV-98	10:02:54	SCAN NUMBER	178
[ 5 ]	SCIENCE	DATA	ELEMENT	0000					
[ 6 ]	CONTROL/STATUS	ELEMENT	00						
[ 7 ]	ENGINEERING	ELEMENT	00						
			COMMANDS						
[ 9 ]	SCANNER A1-1	POWER =	ON					PLLO POWER =	PLLO#1 [ 15 ]
[ 10 ]	SCANNER A1-2	POWER =	ON					COLD CAL POSITION 1 =	YES [ 16 ]
								2 =	NO [ 17 ]
[ 11 ]	ANTENNA FULL	SCAN MODE =	NO					3 =	NO [ 18 ]
[ 12 ]		WARM CAL	=	NO				COLD CAL POSITION 4 =	NO [ 19 ]
[ 13 ]		COLD CAL	=	NO				RESET C&DH PROCESSOR	[ 20 ]
[ 14 ]		NADIR	=	NO				GSE MODE	[ 21 ]
ENGR OK	POWER	ON	CHECKSUM	IN	D85B	CALC	D85B	SA28	179 SA29 308
			SCREEN ONLY [ 2 ]			PRINT [ 3 ]	FULL		[ 1 ] RETURN

SELECT BUTTON 3

*GSE MODE 1*

*R. Hais*  
*11/17/98*

*P.3.3.6.6*

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	COLD CAL SAMPLE 7	16807
2		00000011	574	CH 8	16499
3	PACKET LENGTH	00000010	576	CH 9	16728
4		10111111	578	CH 10	18100
5	UNIT SERIAL NUMBER	00000011	580	CH 11	18280
6		00100000	582	CH 12	18057
7	INSTRUMENT MODE/STATUS	10011010	584	CH 13	20097
8		00000000	586	CH 14	16651
10	REFLECTOR 1 POSITION 1	15281	588	CH 15	4130
12	REFLECTOR 2 POSITION 1	14934	590	REFLECTOR 1 POSITION 18	3779
14	REFL 1 POS 1 2ND LOOK	15281	592	REFLECTOR 2 POSITION 18	4130
16	REFL 2 POS 1 2ND LOOK	14934	594	REFL 1 POS 18 2ND LOOK	4130
18	POS #6 SAMPLE 1	16061	596	REFL 2 POS 18 2ND LOOK	3779
20	CH 3	16658	598	COLD CAL SAMPLE 8	16094
22	CH 4	15956	600	CH 3	16677
24	CH 5	17297	602	CH 4	15986
26	CH 6	15753	604	CH 5	17263
28	CH 7	16802	606	CH 6	15713
30	CH 8	16522	608	CH 7	16807
32	CH 9	16771	610	CH 8	16497
34	CH 10	18130	612	CH 9	16731
36	CH 11	18324	614	CH 10	18104
38	CH 12	18103	616	CH 11	18272
40	CH 13	20147	618	CH 12	18061
42	CH 14	16680	620	CH 13	20082
44	CH 15	15281	622	CH 14	16654
46	REFLECTOR 1 POSITION 2	14934	624	CH 15	4130
48	REFLECTOR 2 POSITION 2	15281	626	REFLECTOR 1 POSITION 19	3779
50	REFL 1 POS 2 2ND LOOK	14934	628	REFLECTOR 2 POSITION 19	4130
52	REFL 2 POS 2 2ND LOOK	16058	630	REFL 1 POS 19 2ND LOOK	3779
54	POS #6 SAMPLE 2	16660	632	REFL 2 POS 19 2ND LOOK	16093
56	CH 3	15954	634	COLD CAL SAMPLE 9	16678
58	CH 4	17302	636	CH 3	15987
60	CH 5	15754	638	CH 4	17262
62	CH 6	16801	640	CH 5	15716
64	CH 7	16523	642	CH 6	16802
66	CH 8	16773	644	CH 7	16500
68	CH 9	18127	646	CH 8	16737
70	CH 10	18319	648	CH 9	18100
72	CH 11	18124	650	CH 10	18273
74	CH 12	20140	652	CH 11	18048
76	CH 13	16679	654	CH 12	20068
78	CH 14	15281	656	CH 13	16653
80	CH 15	14934	658	REFLECTOR 1 POSITION 20	4130
82	REFLECTOR 1 POSITION 3	15281	660	REFLECTOR 2 POSITION 20	3779
84	REFL 1 POS 3 2ND LOOK	14934	662	REFL 1 POS 20 2ND LOOK	4130
86	REFL 2 POS 3 2ND LOOK	16061	664	REFL 2 POS 20 2ND LOOK	3779
88	POS #6 SAMPLE 3	16658	666	COLD CAL SAMPLE 10	16089
90	CH 3	15956	668	CH 3	16675
92	CH 4	17303	670	CH 4	15985
				CH 5	17264
				CH 6	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15757	672	CH 7	15712
96	CH 8	16800	674	CH 8	16808
98	CH 9	16527	676	CH 9	16496
100	CH 10	16773	678	CH 10	16734
102	CH 11	18131	680	CH 11	18107
104	CH 12	18330	682	CH 12	18282
106	CH 13	18103	684	CH 13	18063
108	CH 14	20126	686	CH 14	20076
110	CH 15	16680	688	CH 15	16653
112	REFLECTOR 1 POSITION 4	15281	690	REFLECTOR 1 POSITION 21	8527
114	REFLECTOR 2 POSITION 4	14934	692	REFLECTOR 2 POSITION 21	8178
116	REFL 1 POS 4 2ND LOOK	15281	694	REFL 1 POS 21 2ND LOOK	8527
118	REFL 2 POS 4 2ND LOOK	14934	696	REFL 2 POS 21 2ND LOOK	8178
120	POS #6 SAMPLE 4	16061	698	WARM CAL SAMPLE 1	16061
122	CH 3	16654	700	CH 3	16658
124	CH 4	15958	702	CH 4	15959
126	CH 5	17306	704	CH 5	17261
128	CH 6	15754	706	CH 6	15711
130	CH 7	16802	708	CH 7	16799
132	CH 8	16521	710	CH 8	16498
134	CH 9	16774	712	CH 9	16730
136	CH 10	18130	714	CH 10	18102
138	CH 11	18323	716	CH 11	18284
140	CH 12	18100	718	CH 12	18072
142	CH 13	20118	720	CH 13	20104
144	CH 14	16679	722	CH 14	16653
146	CH 15	15281	724	REFLECTOR 1 POSITION 22	8527
148	REFLECTOR 1 POSITION 5	14934	726	REFLECTOR 2 POSITION 22	8178
150	REFL 1 POS 5 2ND LOOK	15281	728	REFL 1 POS 22 2ND LOOK	8527
152	REFL 2 POS 5 2ND LOOK	14934	730	REFL 2 POS 22 2ND LOOK	8178
154	POS #6 SAMPLE 5	16059	732	WARM CAL SAMPLE 2	16060
156	CH 3	16657	734	CH 3	16661
158	CH 4	15960	736	CH 4	15963
160	CH 5	17303	738	CH 5	17262
162	CH 6	15753	740	CH 6	15717
164	CH 7	16798	742	CH 7	16804
166	CH 8	16522	744	CH 8	16497
168	CH 9	16774	746	CH 9	16735
170	CH 10	18132	748	CH 10	18095
172	CH 11	18327	750	CH 11	18279
174	CH 12	18116	752	CH 12	18052
176	CH 13	20148	754	CH 13	20090
178	CH 14	16680	756	CH 14	16655
180	CH 15	15281	758	REFLECTOR 1 POSITION 23	8527
182	REFLECTOR 1 POSITION 6	14934	760	REFLECTOR 2 POSITION 23	8178
184	REFL 1 POS 6 2ND LOOK	15281	762	REFL 1 POS 23 2ND LOOK	8527
186	REFL 2 POS 6 2ND LOOK	14934	764	REFL 2 POS 23 2ND LOOK	8178
188	POS #6 SAMPLE 6	16061	766	WARM CAL SAMPLE 3	16062
190	CH 3	16660	768	CH 3	16664
192	CH 4	15958	770	CH 4	15959

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17304	772	CH 6	17261
196	CH 7	15754	774	CH 7	15713
198	CH 8	16803	776	CH 8	16803
200	CH 9	16523	778	CH 9	16497
202	CH 10	16779	780	CH 10	16733
204	CH 11	18133	782	CH 11	18105
206	CH 12	18325	784	CH 12	18286
208	CH 13	18104	786	CH 13	18077
210	CH 14	20144	788	CH 14	20105
212	CH 15	16679	790	CH 15	16654
214	REFLECTOR 1 POSITION 7	15281	792	REFLECTOR 1 POSITION 24	8527
216	REFLECTOR 2 POSITION 7	14934	794	REFLECTOR 2 POSITION 24	8178
218	REFL 1 POS 7 2ND LOOK	15281	796	REFL 1 POS 24 2ND LOOK	8527
220	REFL 2 POS 7 2ND LOOK	14934	798	REFL 2 POS 24 2ND LOOK	8178
222	POS #6 SAMPLE 7	16063	800	WARM CAL SAMPLE 4	16072
224	CH 3	16657	802	CH 3	16658
226	CH 4	15960	804	CH 4	15960
228	CH 5	17307	806	CH 5	17264
230	CH 6	15753	808	CH 6	15712
232	CH 7	16798	810	CH 7	16801
234	CH 8	16521	812	CH 8	16496
236	CH 9	16771	814	CH 9	16737
238	CH 10	18126	816	CH 10	18096
240	CH 11	18320	818	CH 11	18276
242	CH 12	18108	820	CH 12	18055
244	CH 13	20148	822	CH 13	20086
246	CH 14	16681	824	CH 14	16653
248	CH 15	15281	826	CH 15	8527
250	REFLECTOR 1 POSITION 8	14934	828	REFLECTOR 1 POSITION 25	8178
252	REFLECTOR 2 POSITION 8	15281	830	REFLECTOR 2 POSITION 25	8527
254	REFL 1 POS 8 2ND LOOK	14935	832	REFL 1 POS 25 2ND LOOK	8178
256	REFL 2 POS 8 2ND LOOK	16061	834	REFL 2 POS 25 2ND LOOK	16063
258	POS #6 SAMPLE 8	16652	836	WARM CAL SAMPLE 5	16663
260	CH 3	15960	838	CH 3	15962
262	CH 4	17307	840	CH 4	17262
264	CH 5	15752	842	CH 5	15714
266	CH 6	16795	844	CH 6	16804
268	CH 7	16525	846	CH 7	16495
270	CH 8	16773	848	CH 8	16737
272	CH 9	18134	850	CH 9	18103
274	CH 10	18323	852	CH 10	18278
276	CH 11	18105	854	CH 11	18059
278	CH 12	20155	856	CH 12	20071
280	CH 13	16679	858	CH 13	16653
282	CH 14	15281	860	CH 14	8527
284	CH 15	14935	862	CH 15	8178
286	REFLECTOR 1 POSITION 9	15281	864	REFLECTOR 1 POSITION 26	8527
288	REFL 1 POS 9 2ND LOOK	14934	866	REFL 1 POS 26 2ND LOOK	8178
290	REFL 2 POS 9 2ND LOOK	16064	868	REFL 2 POS 26 2ND LOOK	16060
292	POS #6 SAMPLE 9	16657	870	WARM CAL SAMPLE 6	16662

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15958	872	CH 5	15960
296	CH 6	17303	874	CH 6	17259
298	CH 7	15754	876	CH 7	15713
300	CH 8	16799	878	CH 8	16801
302	CH 9	16522	880	CH 9	16498
304	CH 10	16776	882	CH 10	16732
306	CH 11	18127	884	CH 11	18103
308	CH 12	18326	886	CH 12	18281
310	CH 13	18109	888	CH 13	18073
312	CH 14	20147	890	CH 14	20122
314	CH 15	16680	892	CH 15	16655
316	REFLECTOR 1 POSITION 10	15281	894	REFLECTOR 1 POSITION 27	8527
318	REFLECTOR 2 POSITION 10	14934	896	REFLECTOR 2 POSITION 27	8178
320	REFL 1 POS 10 2ND LOOK	15281	898	REFL 1 POS 27 2ND LOOK	8527
322	REFL 2 POS 10 2ND LOOK	14934	900	REFL 2 POS 27 2ND LOOK	8178
324	POS #6 SAMPLE 10	16061	902	WARM CAL SAMPLE 7	16063
326	CH 4	16660	904	CH 4	16659
328	CH 5	15960	906	CH 5	15960
330	CH 6	17300	908	CH 6	17262
332	CH 7	15752	910	CH 7	15715
334	CH 8	16798	912	CH 8	16800
336	CH 9	16521	914	CH 9	16496
338	CH 10	16776	916	CH 10	16731
340	CH 11	18127	918	CH 11	18103
342	CH 12	18321	920	CH 12	18287
344	CH 13	18118	922	CH 13	18053
346	CH 14	20145	924	CH 14	20106
348	CH 15	16680	926	CH 15	16653
350	REFLECTOR 1 POSITION 11	4130	928	REFLECTOR 1 POSITION 28	8527
352	REFLECTOR 2 POSITION 11	3779	930	REFLECTOR 2 POSITION 28	8178
354	REFL 1 POS 11 2ND LOOK	4130	932	REFL 1 POS 28 2ND LOOK	8527
356	REFL 2 POS 11 2ND LOOK	3779	934	REFL 2 POS 28 2ND LOOK	8178
358	COLD CAL SAMPLE 1	16095	936	WARM CAL SAMPLE 8	16064
360	CH 4	16673	938	CH 4	16661
362	CH 5	15983	940	CH 5	15960
364	CH 6	17262	942	CH 6	17262
366	CH 7	15712	944	CH 7	15715
368	CH 8	16807	946	CH 8	16800
370	CH 9	16499	948	CH 9	16498
372	CH 10	16738	950	CH 10	16734
374	CH 11	18100	952	CH 11	18096
376	CH 12	18273	954	CH 12	18280
378	CH 13	18069	956	CH 13	18058
380	CH 14	20103	958	CH 14	20110
382	CH 15	16654	960	CH 15	16654
384	REFLECTOR 1 POSITION 12	4130	962	REFLECTOR 1 POSITION 29	8527
386	REFLECTOR 2 POSITION 12	3779	964	REFLECTOR 2 POSITION 29	8178
388	REFL 1 POS 12 2ND LOOK	4130	966	REFL 1 POS 29 2ND LOOK	8527
390	REFL 2 POS 12 2ND LOOK	3779	968	REFL 2 POS 29 2ND LOOK	8178
392	COLD CAL SAMPLE 2	16094	970	WARM CAL SAMPLE 9	16063

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16673	972	CH 4	16656
396	CH 5	15983	974	CH 5	15962
398	CH 6	17266	976	CH 6	17261
400	CH 7	15715	978	CH 7	15715
402	CH 8	16805	980	CH 8	16803
404	CH 9	16496	982	CH 9	16495
406	CH 10	16735	984	CH 10	16729
408	CH 11	18101	986	CH 11	18104
410	CH 12	18281	988	CH 12	18274
412	CH 13	18068	990	CH 13	18058
414	CH 14	20100	992	CH 14	20103
416	CH 15	16655	994	CH 15	16652
418	REFLECTOR 1 POSITION 13	4130	996	REFLECTOR 1 POSITION 30	8527
420	REFLECTOR 2 POSITION 13	3779	998	REFLECTOR 2 POSITION 30	8178
422	REFL 1 POS 13 2ND LOOK	4130	1000	REFL 1 POS 30 2ND LOOK	8527
424	REFL 2 POS 13 2ND LOOK	3779	1002	REFL 2 POS 30 2ND LOOK	8178
426	COLD CAL SAMPLE 3 CH 3	16092	1004	WARM CAL SAMPLE 10 CH 3	16060
428	CH 4	16676	1006	CH 4	16661
430	CH 5	15986	1008	CH 5	15960
432	CH 6	17265	1010	CH 6	17261
434	CH 7	15715	1012	CH 7	15711
436	CH 8	16806	1014	CH 8	16802
438	CH 9	16499	1016	CH 9	16497
440	CH 10	16734	1018	CH 10	16727
442	CH 11	18106	1020	CH 11	18099
444	CH 12	18283	1022	CH 12	18281
446	CH 13	18053	1024	CH 13	18074
448	CH 14	20095	1026	CH 14	20063
450	CH 15	16654	1028	CH 15	16653
452	REFLECTOR 1 POSITION 14	4130	1030	REFLECTOR 1 COLD CAL POS	OE
454	REFLECTOR 2 POSITION 14	3779	1032	REFLECTOR 2 COLD CAL POS	OE
456	REFL 1 POS 14 2ND LOOK	4130	1034	REFL 1 COLD CAL 2ND LOOK	OE
458	REFL 2 POS 14 2ND LOOK	3779	1036	REFL 2 COLD CAL 2ND LOOK	OE
460	COLD CAL SAMPLE 4 CH 3	16097	1038	COLD CAL DATA 1 CH 3	0
462	CH 4	16677	1040	CH 4	0
464	CH 5	15986	1042	CH 5	0
466	CH 6	17262	1044	CH 6	0
468	CH 7	15715	1046	CH 7	0
470	CH 8	16808	1048	CH 8	0
472	CH 9	16498	1050	CH 9	0
474	CH 10	16733	1052	CH 10	0
476	CH 11	18094	1054	CH 11	0
478	CH 12	18287	1056	CH 12	0
480	CH 13	18062	1058	CH 13	0
482	CH 14	20081	1060	CH 14	0
484	CH 15	16654	1062	CH 15	0
486	REFLECTOR 1 POSITION 15	4130	1064	COLD CAL DATA 2 CH 3	0
488	REFLECTOR 2 POSITION 15	3779	1066	CH 4	0
490	REFL 1 POS 15 2ND LOOK	4130	1068	CH 5	0
492	REFL 2 POS 15 2ND LOOK	3779	1070	CH 6	0

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	COLD CAL SAMPLE 5	CH 3	1072		CH 7
496		CH 4	16094		CH 8
498		CH 5	16676		CH 9
500		CH 6	15988		CH 10
502		CH 7	17265		CH 11
504		CH 8	15714		CH 12
506		CH 9	16804		CH 13
508		CH 10	16495		CH 14
510		CH 11	16731		CH 15
512		CH 12	18103		OE
514		CH 13	18274	REFLECTOR 1 WARM CAL POS	OE
516		CH 14	18060	REFLECTOR 2 WARM CAL POS	OE
518		CH 15	20089	REFL 1 WARM CAL 2ND LOOK	OE
520	REFLECTOR 1 POSITION 16	CH 16	16652	REFL 2 WARM CAL 2ND LOOK	OE
522	REFLECTOR 2 POSITION 16	CH 17	4130	WARM CAL DATA 1	0
524	REFL 1 POS 16 2ND LOOK	CH 18	3779		0
526	REFL 2 POS 16 2ND LOOK	CH 19	4130		0
528	COLD CAL SAMPLE 6	CH 20	3779		0
530		CH 21	16091		0
532		CH 22	16675		0
534		CH 23	15985		0
536		CH 24	17263		0
538		CH 25	15711		0
540		CH 26	16806		0
542		CH 27	16493		0
544		CH 28	16733		0
546		CH 29	18102		0
548		CH 30	18275		0
550		CH 31	18060		0
552		CH 32	20110		0
554	REFLECTOR 1 POSITION 17	CH 33	16654		0
556	REFLECTOR 2 POSITION 17	CH 34	4130		0
558	REFL 1 POS 17 2ND LOOK	CH 35	3779		0
560	REFL 2 POS 17 2ND LOOK	CH 36	4130		0
562	COLD CAL SAMPLE 7	CH 37	3779		0
564		CH 38	16094		0
566		CH 39	16676		0
568		CH 40	15984		0
570		CH 41	17264		0
		CH 42	15712		0
		CH 43			0
		CH 44			0
		CH 45			0
		CH 46			0
		CH 47			0
		CH 48			0
		CH 49			0
		CH 50			0
		CH 51			0
		CH 52			0
		CH 53			0
		CH 54			0
		CH 55			0
		CH 56			0
		CH 57			0
		CH 58			0
		CH 59			0
		CH 60			0
		CH 61			0
		CH 62			0
		CH 63			0
		CH 64			0
		CH 65			0
		CH 66			0
		CH 67			0
		CH 68			0
		CH 69			0
		CH 70			0
		CH 71			0
		CH 72			0
		CH 73			0
		CH 74			0
		CH 75			0
		CH 76			0
		CH 77			0
		CH 78			0
		CH 79			0
		CH 80			0
		CH 81			0
		CH 82			0
		CH 83			0
		CH 84			0
		CH 85			0
		CH 86			0
		CH 87			0
		CH 88			0
		CH 89			0
		CH 90			0
		CH 91			0
		CH 92			0
		CH 93			0
		CH 94			0
		CH 95			0
		CH 96			0
		CH 97			0
		CH 98			0
		CH 99			0
		CH 100			0
		CH 101			0
		CH 102			0
		CH 103			0
		CH 104			0
		CH 105			0
		CH 106			0
		CH 107			0
		CH 108			0
		CH 109			0
		CH 110			0
		CH 111			0
		CH 112			0
		CH 113			0
		CH 114			0
		CH 115			0
		CH 116			0
		CH 117			0
		CH 118			0
		CH 119			0
		CH 120			0
		CH 121			0
		CH 122			0
		CH 123			0
		CH 124			0
		CH 125			0
		CH 126			0
		CH 127			0
		CH 128			0
		CH 129			0
		CH 130			0
		CH 131			0
		CH 132			0
		CH 133			0
		CH 134			0
		CH 135			0
		CH 136			0
		CH 137			0
		CH 138			0
		CH 139			0
		CH 140			0
		CH 141			0
		CH 142			0
		CH 143			0
		CH 144			0
		CH 145			0
		CH 146			0
		CH 147			0
		CH 148			0
		CH 149			0
		CH 150			0
		CH 151			0
		CH 152			0
		CH 153			0
		CH 154			0
		CH 155			0
		CH 156			0
		CH 157			0
		CH 158			0
		CH 159			0
		CH 160			0
		CH 161			0
		CH 162			0
		CH 163			0
		CH 164			0
		CH 165			0
		CH 166			0
		CH 167			0
		CH 168			0
		CH 169			0
		CH 170			0
		CH 171			0
		CH 172			0
		CH 173			0
		CH 174			0
		CH 175			0
		CH 176			0
		CH 177			0
		CH 178			0
		CH 179			0
		CH 180			0
		CH 181			0
		CH 182			0
		CH 183			0
		CH 184			0
		CH 185			0
		CH 186			0
		CH 187			0
		CH 188			0
		CH 189			0
		CH 190			0
		CH 191			0
		CH 192			0
		CH 193			0
		CH 194			0
		CH 195			0
		CH 196			0
		CH 197			0
		CH 198			0
		CH 199			0
		CH 200			0
		CH 201			0
		CH 202			0
		CH 203			0
		CH 204			0
		CH 205			0
		CH 206			0
		CH 207			0
		CH 208			0
		CH 209			0
		CH 210			0
		CH 211			0
		CH 212			0
		CH 213			0
		CH 214			0
		CH 215			0
		CH 216			0
		CH 217			0
		CH 218			0
		CH 219			0
		CH 220			0
		CH 221			0
		CH 222			0
		CH 223			0
		CH 224			0
		CH 225			0
		CH 226			0
		CH 227			0
		CH 228			0
		CH 229			0
		CH 230			0
		CH 231			0
		CH 232			0
		CH 233			0
		CH 234			0
		CH 235			0
		CH 236			0
		CH 237			0
		CH 238			0
		CH 239			0
		CH 240			0
		CH 241			0
		CH 242			0
		CH 243			0
		CH 244			0
		CH 245			0
		CH 246			0
		CH 247			0
		CH 248			0
		CH 249			0
		CH 250			0
		CH 251			0
		CH 252			0
		CH 253			0
		CH 254			0
		CH 255			0
		CH 256			0
		CH 257			0
		CH 258			0
		CH 259			0
		CH 260			0
		CH 261			0
		CH 262			0
		CH 263			0
		CH 264			0
		CH 265			0
		CH 266			0
		CH 267			0
		CH 268			0
		CH 269			0
		CH 270			0
		CH 271			0
		CH 272			0
		CH 273			0
		CH 274			0
		CH 275			0
		CH 276			0
		CH 277			0
		CH 278			0
		CH 279			0
		CH 280			0
		CH 281			0
		CH 282			0
		CH 283			0
		CH 284			0
		CH 285			0
		CH 286			0
		CH 287			0
		CH 288			0
		CH 289			0
		CH 290			0
		CH 291			0
		CH 292			0
		CH 293			0
		CH 294			0
		CH 295			0
		CH 296			0
		CH 297			0
		CH 298			0
		CH 299			0
		CH 300			0

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE	DEG C
1090	SCAN MOTOR A1-1	17756		22.47
1092	SCAN MOTOR A1-2	18841		23.83
1094	FEED HORN A1-1	19328		25.80
1096	FEED HORN A1-2	20211		27.53
1098	RF MUX A1-1	20824		28.50
1100	RF MUX A1-2	21842		30.57
1102	LOCAL OSCILLATOR CHANNEL 3	22719		32.50
1104	LOCAL OSCILLATOR CHANNEL 4	23126		32.59
1106	LOCAL OSCILLATOR CHANNEL 5	22107		31.28
1108	LOCAL OSCILLATOR CHANNEL 6	21381		28.94
1110	LOCAL OSCILLATOR CHANNEL 7	21462		29.81
1112	LOCAL OSCILLATOR CHANNEL 8	22596		32.06
1114	LOCAL OSCILLATOR CHANNEL 15	22452		31.35
1116	PLLO #2	20690		28.27
1118	PLLO #1	23549		33.82
1120	1553 INTERFACE	16738		33.62
1122	MIXER/IF AMPLIFIER CHANNEL 3	22111		31.00
1124	MIXER/IF AMPLIFIER CHANNEL 4	22276		30.89
1126	MIXER/IF AMPLIFIER CHANNEL 5	21958		30.68
1128	MIXER/IF AMPLIFIER CHANNEL 6	21109		29.05
1130	MIXER/IF AMPLIFIER CHANNEL 7	21028		29.46
1132	MIXER/IF AMPLIFIER CHANNEL 8	22187		31.05
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	20603		28.31
1136	MIXER/IF AMPLIFIER CHANNEL 15	22229		31.44
1138	IF AMPLIFIER CHANNEL 11 THRU 14	21977		30.45
1140	IF AMPLIFIER CHANNEL 9	22141		30.01
1142	IF AMPLIFIER CHANNEL 10	22003		30.96
1144	IF AMPLIFIER CHANNEL 11	21279		28.70
1146	DC/DC CONVERTER	23836		33.66
1148	IF AMPLIFIER CHANNEL 13	20886		28.08
1150	IF AMPLIFIER CHANNEL 14	21236		29.19
1152	IF AMPLIFIER CHANNEL 12	21032		28.59
1154	RF SHELF A1-1	21488		29.77
1156	RF SHELF A1-2	21991		30.10
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	19659		26.30
1160	A1-1 WARM LOAD 1	23113		23.24
1162	A1-1 WARM LOAD 2	23609		23.35
1164	A1-1 WARM LOAD 3	23109		23.38
1166	A1-1 WARM LOAD 4	23183		23.35
1168	A1-1 WARM LOAD CENTER	23382		23.36
1170	A1-2 WARM LOAD 1	24173		24.79
1172	A1-2 WARM LOAD 2	24223		24.80
1174	A1-2 WARM LOAD 3	24241		24.80
1176	A1-2 WARM LOAD 4	24235		24.70
1178	A1-2 WARM LOAD CENTER	24239		24.80
1180	TEMP SENSOR REFERENCE VOLTAGE	25266		



DESCRIPTION

STATUS

ANTENNA IN FULL SCAN MODE	NO
ANTENNA IN WARM CAL MODE	NO
ANTENNA IN COLD CAL MODE	NO
ANTENNA IN NADIR MODE	NO
COLD CAL. POSITION LSB	ZERO
COLD CAL. POSITION MSB	ZERO
PLO REDUNDANCY	PLO # 1
SCANNER A1-1 POWER	ON
SCANNER A1-2 POWER	ON
PLO #1 LOCK	YES
PLO #2 LOCK	OFF
ADC LATCHUP FLAG	ONE

ENGINEERING DATA

DESCRIPTION	VALUE	MA/VOLTS	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	22079	5.3	22.1
A1-1 RF SHELF TEMPERATURE #1	21820	15.7	27.2
A1-1 WARM LOAD TEMPERATURE	21795	-13.8	22.7
A1-2 SCANNER MOTOR TEMPERATURE	22139	5.3	24.1
A1-2 RF SHELF TEMPERATURE #1	22093	15.6	30.4
A1-2 WARM LOAD TEMPERATURE	21747	-13.8	24.3
A1-1 RF SHELF TEMPERATURE #2	22576	15.4	27.0
A1-2 RF SHELF TEMPERATURE #2	22072	-14.0	30.1
SIGNAL PROCESSOR	21821	8.4	
SCAN DRIVE	21422	10.5	
PLO	21430	10.5	
RECEIVER	21399	10.5	
MIXER/IF AMPLIFIER A1-1	21437	10.5	
A1-2	32767	301.7	
LO CHANNEL 6	21244	10.5	
7	21176	10.6	
SPARE	21402	10.5	
LO CHANNEL 3	21313	10.5	
4	22013	15.6	
5	16105	2035.9	
8	4905	13.9	
15	4736	13.5	
QUIET BUS CURRENT			
A1-1 NOISY POWER BUS CURRENT			
A1-2 NOISY POWER BUS CURRENT			

## PRT TEMPERATURES

## VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

## FIXED TARGET

## BASEPLATE

## THERMOCOUPLE TEMPERATURES

## FIXED TARGET SHROUD

## VARIABLE TARGET SHROUD

## FIXED TARGET N2

## VARIABLE TARGET N2

## HEATER N2

## FIXED TARGET FLOW METER

## VARIABLE TARGET FLOW METER

## BASEPLATE HEATER N2

## BASEPLATE N2

## BASEPLATE FLOW METER

## ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
	75.00	581	76.00

**TEST DATA SHEET NO. 20**  
Radiometer Functional Performance Test (PLO Frequency Measurements) (Paragraph 3.3.7.1)

PLO FREQUENCY MEASUREMENTS			
PLO	Measured Frequency (GHz)	Required Frequency (GHz)	Pass/Fail
# 1	57.290392	57.290294 - 57.290394	P
# 2	57.290392	57.290294 - 57.290394	P

P = Pass F = Fail

EOS/AMSU-A1 System P/N 1356008

Shop Order: 560863

S/N: 202

Circle Test: 1<sup>st</sup> CPT Final CPT

C. Galazac 11/30/98  
Customer Representative Date

R. Vaish 11/17/98  
Test Systems Engineer Date  
200 NOV 19 1998  
Quality Control Date



*R. H. H. H.*  
*11/17/88*

*P. 3.3.7.1*

MKR 57.290 392 GHz  
-87.03 dBm

TDS 20

HARMONIC 10L

REF -82.3 dBm

1 dB/

1 dB/

CNVLOSS  
24.0  
dB

MARKER  
57.290 392 GHz  
-87.03 dBm

MEAS UNCAL

SPAN 2.00 MHz  
SWP 500 msec

VBW 10 Hz

CENTER 57.290 58 GHz  
RES BW 300 kHz

*Plot#2*

R. Hall  
11/17/88

P. 3.3.7.1

TDS 20

MR 57.290 392 GHz  
-87.65 dBm

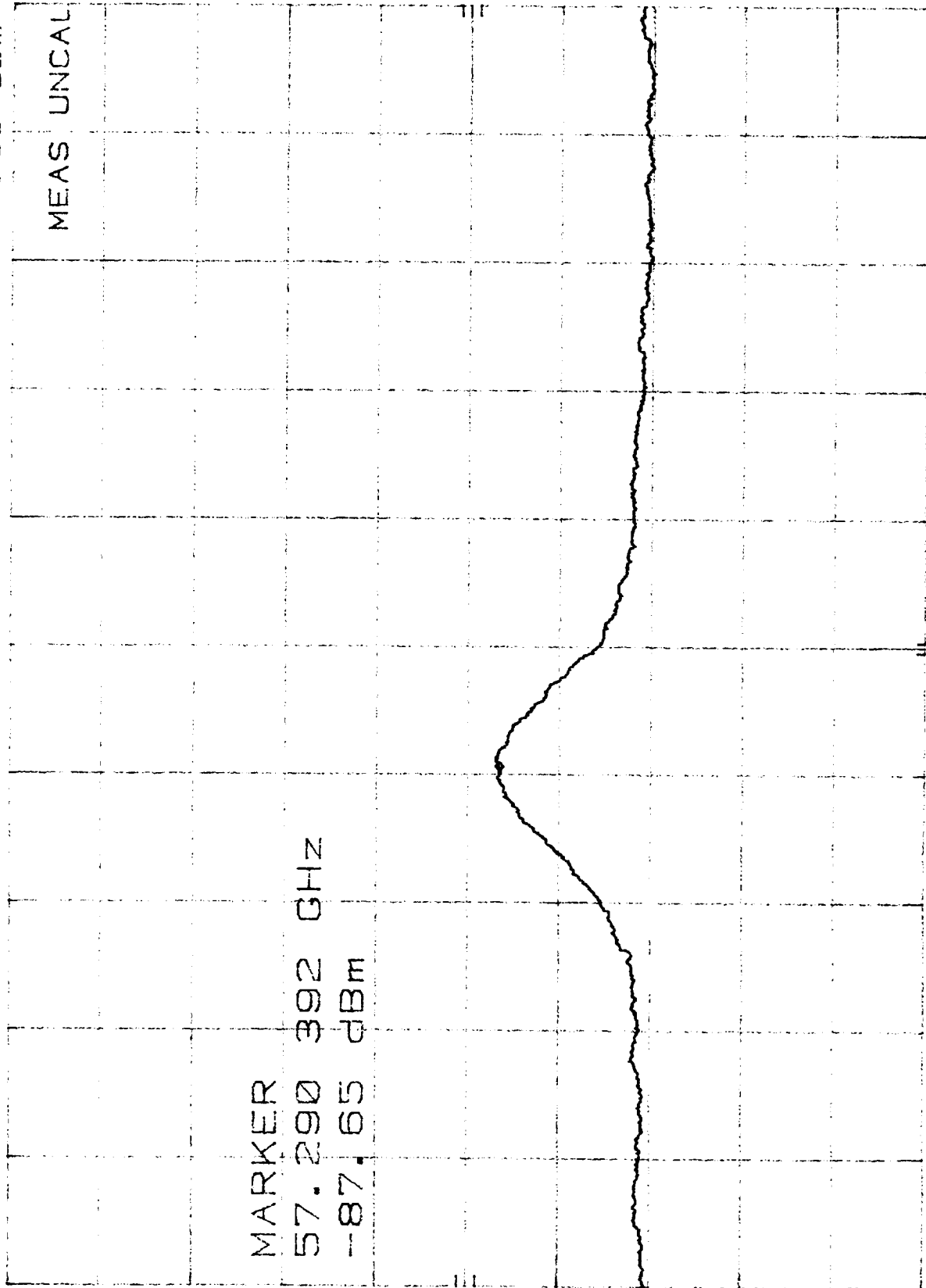
H<sub>10</sub> REF -82.3 dBm HARMONIC 10L

1 dB/

CNVLOSS  
24.0  
dB

MARKER  
57.290 392 GHz  
-87.65 dBm

MEAS UNCAL



SPAN 2.00 MHz  
SWP 500 msec  
PLOT#1

VBW 10 Hz

CENTER 57.290 58 GHz  
RES BW 300 kHz

**TEST DATA SHEET NO. 22**  
Channel Identification Test (Paragraph 3.3.8)

Channel Number	Antenna Location	Sweeper Freq. Setting (GHz)	Polarization (H/V)	Radiometric Data $\Delta$ Counts	Channel Verified (Yes/No)
3	A1-2	50.35	V	13,000	Yes
4	A1-2	52.85	V	16,000	Yes
5	A1-2	53.70	H	16,600	Yes
6	A1-1	54.45	H	13,100	Yes
7	A1-1	54.99	V	16,800	Yes
8	A1-2	55.55	H	10,300	Yes
9	A1-1	57.34	H	16,100	Yes
10	A1-1	57.50	H	15,900	Yes
11	A1-1	57.564	H	14,500	Yes
12	A1-1	57.59	H	14,500	Yes
13	A1-1	57.602	H	14,500	Yes
14	A1-1	57.608	H	12,500	Yes
15	A1-1	89.55	V	16,200	YES

EOS/AMSU-A1 System P/N 1356008 Shop Order: 560862 S/N: 202  
Circle Test: CPT Final CPT Sub CPT \_\_\_\_\_ LPT \_\_\_\_\_

J. Zabegas 11/30/98  
Customer Representative Date

Theresa K. Shaw 11/18/98  
Test Systems Engineer Date  
200 NOV 19 1998  
Quality Control Date





TAR 4349



**TEST DATA SHEET NO. 9 (Sheet 1 of 3)**  
**Science and Engineering Data Test (Full Scan Mode) (Paragraph 3.3.5.3.1)**

Step	Instrument Status	(Y)es / (N)o
1	Full Scan Mode command received?	Yes
2	ENGR OK message seen?	Yes
3	Unit (both reflectors) running in full scan mode?	Yes

Yes = Pass No = Fail

Step	Element	Description	Measured Value* (Binary)	Required Value (Binary)	(P)ass/(F)ail
4a	1-2	Packet ID		0000100100000101	Pass
4b	3-4	Packet Length		0000001010111111	Pass
4c	5-6	Unit Serial Number		0000001100000000	Pass
4d	7-8	Instrument Mode/ Status		1001101000000010	Pass

RADIOMETER SCENE DATA			
Step	Description	Required Counts	(P)ass/(F)ail
4f	Review All Scene Data	12500-20500	Pass

PRT TEMPERATURE DATA				
Step	Element	Description	Required	(P)ass/(F)ail
4g	1090-1178	Review All PRT Data**	10-40 degrees C	Pass
4g	1180	Temperature Sensor Reference	23244-26317 counts	Pass

STATUS				
Step	Description	Status*	Required Status	(P)ass/(F)ail
4h	Antenna in Full Scan Mode		YES	Pass
	Antenna in Warm Cal Mode		NO	
	Antenna in Cold Cal Mode		NO	
	Antenna in Nadir Mode		NO	
	Cold Cal Position LSB		ZERO	
	Cold Cal Position MSB		ZERO	
	PLO Redundancy		PLO #1	
	Scanner A1-1 Power		ON	
	Scanner A1-2 Power		ON	
	PLO #1 Lock		YES	
	PLO #2 Lock		OFF	
	ADC Latchup Flag		ONE	Pass

\* Rewriting printout data on this data sheet is optional.

\*\* Refer to Table IV for PRT Data Description

EOS/AMSU-A1 System P/N 1356008  
Circle Test: 1<sup>st</sup> CPT Final CPTShop Order: 560863  
Sub CPT \_\_\_\_\_S/N: 202  
LPT \_\_\_\_\_

Customer Representative

Date

Test Systems Engineer

Date

Quality Control

Date

TAR # 004349 Op #8030

**TEST DATA SHEET NO. 9** (Sheet 2 of 3)  
Science and Engineering Data Test (Full Scan Mode) (Paragraph 3.3.5.3.1)

REFLECTOR POSITIONS (Step 4e)								
BP	A1-1 REFLECTOR				A1-2 REFLECTOR			
	Element	Position (*)	Required (**) $\pm 5$	(P)ass/ (F)ail	Element	Position (*)	Required (**) $\pm 5$	(P)ass/ (F)ail
1	14		14520	PASS	16		14168	PASS
2	48		14672		50		14320	
3	82		14824		84		14472	
4	116		14975		118		14623	
5	150		15127		152		14775	
6	184		15279		186		14927	
7	218		15430		220		15078	
8	252		15582		254		15230	
9	286		15734		288		15382	
10	320		15885		322		15533	
11	354		16037		356		15685	
12	388		16189		390		15837	
13	422		16340		424		15988	
14	456		108		458		16140	
15	490		260		492		16292	
16	524		411		526		59	
17	558		563		560		211	
18	592		715		594		363	
19	626		866		628		514	
20	660		1018		662		666	
21	694		1170		696		818	
22	728		1321		730		969	
23	762		1473		764		1121	
24	796		1625		798		1273	
25	830		1776		832		1424	
26	864		1928		866		1576	
27	898		2080		900		1728	
28	932		2231		934		1879	
29	966		2383		968		2031	
30	1000		2535		1002		2183	
CC	1034		4129	↓	1036		3777	↓
WC	1186		8528	PASS	1188		8176	PASS

\* Actual counts from printout. Rewriting counts on this data sheet is optional.  
\*\* Required counts from AE26002/1 TDS 5&6 +/- 5 counts

Op. 0580

EOS/AMSU-A1 System P/N 1356008 Shop Order: 566863 S/N: 202  
Circle Test: 1<sup>st</sup> CPT Final CPT Sub CPT \_\_\_\_\_ LPT \_\_\_\_\_

J. Sanford 11-24-98  
Customer Representative Date

Ken Shaw 11/19/98  
Test Systems Engineer 200 NOV 19 1998  
Quality Control Date

**TEST DATA SHEET NO. 9** (Sheet 3 of 3)  
Science and Engineering Data Test (Full Scan Mode) (Paragraph 3.3.5.3.1)

ENGINEERING DATA				
Step	Description	Measured*	Required	(P)ass/(F)ail
4i	Signal Processor (+5 VDC)		+4 to +6 volts	PASS
	Signal Processor (+15 VDC)		+14 to +16 volts	
	Signal Processor (-15 VDC)		-14 to -16 volts	
	Scan Drive (+5 VDC)		+4 to +6 volts	
	Scan Drive (+15 VDC)		+14 to +16 volts	
	Scan Drive (-15 VDC)		-14 to -16 volts	
	PLO (+15 VDC)		+14 to +16 volts	
	PLO (-15 VDC)		-14 to -16 volts	
	Receiver (+8 VDC)		+7 to +9 volts	
	Mixer/IF Amplifier A1-1 (+10 VDC)		+9 to +11 volts	
	Mixer/IF Amplifier A1-2 (+10 VDC)		+9 to +11 volts	
	LO Channel 6		+9 to +11 volts	
	LO Channel 7		+9 to +11 volts	
	LO Channel 3		+9 to +11 volts	
	LO Channel 4		+9 to +11 volts	
	LO Channel 5		+9 to +11 volts	
	LO Channel 8		+9 to +11 volts	
	LO Channel 15		+14 to +16 volts	
	Quiet Bus Current		≤ 3 Amps	
	A1-1 Noisy Bus Current		≤ 125 milliamps	
	A1-2 Noisy Bus Current		≤ 125 milliamps	PASS

\* Rewriting printout data on this data sheet is optional.

EOS/AMSU-A1 System P/N 1356008 Shop Order: CP 0582 560863 S/N: 202  
Circle Test: 1<sup>st</sup> CPT Final CPT Sub CPT \_\_\_\_\_ LPT \_\_\_\_\_

J. Sanford 11/24/98  
Customer Representative Date

Ken Sham 11/23/98  
Test Systems Engineer Date  
Quality Control 11/23/98 Date



```

EOS A1-03 .EXE;41 FULL SCAN MODE P1 19-NOV-98 10:22:45 AN NUMBER 402
[ 5 ] SCIENCE DATA ELEMENT 0000
[ 6 ] CONTROL/STATUS ELEMENT 00
[ 7 ] ENGINEERING ELEMENT 00
      COMMANDS
[ 9 ] SCANNER A1-1 POWER = ON PLO POWER = PLO#1 [ 15 ]
[10 ] SCANNER A1-2 POWER = ON COLD CAL POSITION 1 = YES [ 16 ]
[11 ] ANTENNA FULL SCAN MODE = YES 2 = NO [ 17 ]
[12 ] WARM CAL = NO 3 = NO [ 18 ]
[13 ] COLD CAL = NO COLD CAL POSITION 4 = NO [ 19 ]
[14 ] NADIR = NO RESET C&DH PROCESSOR [ 20 ]
      GSE MODE [ 21 ]
ENGR OK POWER ON CHECKSUM IN 1339 CALC 1339 SA28 403 SA29 794
      SCREEN ONLY [ 2 ] PRINT [ 3 ] FULL [ 1 ] RETURN
SELECT BUTTON 3

```

Final CPT EOS A1 S/N 202 S/O 560863 Op. 0580  
 TAR 004349 Op 8030  
 Data in support of AE 26156/9A Para 3.3.5.3.1 Step 4

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	SCENE DATA BP 17	CH 8
2		00000101	574		CH 9
3	PACKET LENGTH	00000010	576		CH 10
4		10111111	578		CH 11
5	UNIT SERIAL NUMBER	00000011	580		CH 12
6		00000000	582		CH 13
7	INSTRUMENT MODE/STATUS	10011010	584		CH 14
8		00000010	586		CH 15
10	REFLECTOR 1 POSITION 1	14522	588	REFLECTOR 1 POSITION 18	719
12	REFLECTOR 2 POSITION 1	14169	590	REFLECTOR 2 POSITION 18	366
14	REFL 1 POS 1 2ND LOOK	14521	592	REFL 1 POS 18 2ND LOOK	714
16	REFL 2 POS 1 2ND LOOK	14169	594	REFL 2 POS 18 2ND LOOK	361
18	SCENE DATA BP 1	16100	596	SCENE DATA BP 18	16092
20		16708	598		CH 3
22		16010	600		CH 4
24		17271	602		CH 5
26		15767	604		CH 6
28		16857	606		CH 7
30		16519	608		CH 8
32		16767	610		CH 9
34		18205	612		CH 10
36		18427	614		CH 11
38		18159	616		CH 12
40		20260	618		CH 13
42		16678	620		CH 14
44	REFLECTOR 1 POSITION 2	14678	622	REFLECTOR 1 POSITION 19	16701
46	REFLECTOR 2 POSITION 2	14323	624	REFLECTOR 2 POSITION 19	873
48	REFL 1 POS 2 2ND LOOK	14671	626	REFL 1 POS 19 2ND LOOK	518
50	REFL 2 POS 2 2ND LOOK	14319	628	REFL 2 POS 19 2ND LOOK	865
52	SCENE DATA BP 2	16102	630	SCENE DATA BP 19	515
54		16698	632		CH 3
56		16002	634		CH 4
58		17270	636		CH 5
60		15768	638		CH 6
62		16849	640		CH 7
64		16523	642		CH 8
66		16766	644		CH 9
68		18206	646		CH 10
70		18432	648		CH 11
72		18159	650		CH 12
74		20284	652		CH 13
76		16680	654		CH 14
78	REFLECTOR 1 POSITION 3	14831	656	REFLECTOR 1 POSITION 20	16681
80	REFLECTOR 2 POSITION 3	14473	658	REFLECTOR 2 POSITION 20	1022
82	REFL 1 POS 3 2ND LOOK	14823	660	REFL 1 POS 20 2ND LOOK	669
84	REFL 2 POS 3 2ND LOOK	14469	662	REFL 2 POS 20 2ND LOOK	1017
86	SCENE DATA BP 3	16081	664	SCENE DATA BP 20	665
88		16693	666		CH 3
90		15991	668		CH 4
92		17277	670		CH 5
					CH 6



ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15770	672	CH 7	15764
96	CH 8	16843	674	CH 8	16840
98	CH 9	16534	676	CH 9	16523
100	CH 10	16782	678	CH 10	16775
102	CH 11	18223	680	CH 11	18207
104	CH 12	18440	682	CH 12	18430
106	CH 13	18174	684	CH 13	18174
108	CH 14	20288	686	CH 14	20314
110	CH 15	16685	688	CH 15	16682
112	REFLECTOR 1 POSITION 4	14985	690	REFLECTOR 1 POSITION 21	1176
114	REFLECTOR 2 POSITION 4	14625	692	REFLECTOR 2 POSITION 21	820
116	REFL 1 POS 4 2ND LOOK	14974	694	REFL 1 POS 21 2ND LOOK	1169
118	REFL 2 POS 4 2ND LOOK	14621	696	REFL 2 POS 21 2ND LOOK	815
120	SCENE DATA BP 4	16074	698	SCENE DATA BP 21	16060
122	CH 3	16690	700	CH 3	16684
124	CH 4	15991	702	CH 4	15986
126	CH 5	17308	704	CH 5	17274
128	CH 6	15779	706	CH 6	15760
130	CH 7	16844	708	CH 7	16835
132	CH 8	16538	710	CH 8	16518
134	CH 9	16779	712	CH 9	16764
136	CH 10	18229	714	CH 10	18208
138	CH 11	18445	716	CH 11	18418
140	CH 12	18171	718	CH 12	18148
142	CH 13	20275	720	CH 13	20283
144	CH 14	16695	722	CH 14	16678
146	CH 15	15134	724	CH 15	1330
148	REFLECTOR 1 POSITION 5	14775	726	REFLECTOR 1 POSITION 22	972
150	REFLECTOR 2 POSITION 5	15127	728	REFLECTOR 2 POSITION 22	1321
152	REFL 1 POS 5 2ND LOOK	14773	730	REFL 1 POS 22 2ND LOOK	967
154	REFL 2 POS 5 2ND LOOK	16084	732	REFL 2 POS 22 2ND LOOK	16070
156	SCENE DATA BP 5	16687	734	SCENE DATA BP 22	16686
158	CH 3	15992	736	CH 3	15987
160	CH 4	17299	738	CH 4	17269
162	CH 5	15794	740	CH 5	15761
164	CH 6	16840	742	CH 6	16837
166	CH 7	16548	744	CH 7	16517
168	CH 8	16781	746	CH 8	16764
170	CH 9	18226	748	CH 9	18207
172	CH 10	18426	750	CH 10	18418
174	CH 11	18161	752	CH 11	18172
176	CH 12	20271	754	CH 12	20266
178	CH 13	16690	756	CH 13	16679
180	CH 14	15285	758	CH 14	1479
182	CH 15	14930	760	CH 15	1123
184	REFLECTOR 1 POSITION 6	15279	762	REFLECTOR 2 POSITION 23	1473
186	REFL 1 POS 6 2ND LOOK	14926	764	REFL 1 POS 23 2ND LOOK	1119
188	REFL 2 POS 6 2ND LOOK	16076	766	REFL 2 POS 23 2ND LOOK	16073
190	SCENE DATA BP 6	16688	768	SCENE DATA BP 23	16687
192	CH 3	15995	770	CH 3	15992
	CH 4			CH 4	
	CH 5			CH 5	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17305	772	CH 6	17267
196	CH 7	15799	774	CH 7	15761
198	CH 8	16839	776	CH 8	16834
200	CH 9	16545	778	CH 9	16516
202	CH 10	16793	780	CH 10	16766
204	CH 11	18234	782	CH 11	18212
206	CH 12	18451	784	CH 12	18423
208	CH 13	18187	786	CH 13	18155
210	CH 14	20324	788	CH 14	20290
212	CH 15	16699	790	CH 15	16678
214	REFLECTOR 1 POSITION 7	15439	792	REFLECTOR 1 POSITION 24	1631
216	REFLECTOR 2 POSITION 7	15082	794	REFLECTOR 2 POSITION 24	1276
218	REFL 1 POS 7 2ND LOOK	15430	796	REFL 1 POS 24 2ND LOOK	1625
220	REFL 2 POS 7 2ND LOOK	15076	798	REFL 2 POS 24 2ND LOOK	1272
222	SCENE DATA BP 7	16073	800	SCENE DATA BP 24	16060
224	CH 3	16686	802	CH 3	16687
226	CH 4	15996	804	CH 4	15994
228	CH 5	17274	806	CH 5	17270
230	CH 6	15769	808	CH 6	15765
232	CH 7	16840	810	CH 7	16834
234	CH 8	16528	812	CH 8	16516
236	CH 9	16774	814	CH 9	16764
238	CH 10	18208	816	CH 10	18208
240	CH 11	18437	818	CH 11	18427
242	CH 12	18163	820	CH 12	18160
244	CH 13	20298	822	CH 13	20259
246	CH 14	16683	824	CH 14	16679
248	CH 15	15590	826	CH 15	1784
250	REFLECTOR 1 POSITION 8	15232	828	REFLECTOR 1 POSITION 25	1427
252	REFLECTOR 2 POSITION 8	15232	830	REFLECTOR 2 POSITION 25	1775
254	REFL 1 POS 8 2ND LOOK	15581	832	REFL 1 POS 25 2ND LOOK	1422
256	REFL 2 POS 8 2ND LOOK	15233	834	REFL 2 POS 25 2ND LOOK	16079
258	SCENE DATA BP 8	16079	836	SCENE DATA BP 25	16688
260	CH 3	16689	838	CH 3	15993
262	CH 4	15989	840	CH 4	17265
264	CH 5	17272	842	CH 5	15764
266	CH 6	15768	844	CH 6	16837
268	CH 7	16843	846	CH 7	16520
270	CH 8	16521	848	CH 8	16758
272	CH 9	16772	850	CH 9	18214
274	CH 10	18215	852	CH 10	18420
276	CH 11	18427	854	CH 11	18163
278	CH 12	18162	856	CH 12	20281
280	CH 13	20271	858	CH 13	16680
282	CH 14	16680	860	CH 14	1936
284	CH 15	15740	862	CH 15	1578
286	REFLECTOR 1 POSITION 9	15385	864	REFLECTOR 2 POSITION 26	1927
288	REFL 1 POS 9 2ND LOOK	15733	866	REFL 1 POS 26 2ND LOOK	1576
290	REFL 2 POS 9 2ND LOOK	15380	868	REFL 2 POS 26 2ND LOOK	16083
292	SCENE DATA BP 9	16073	870	SCENE DATA BP 26	16696

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15986	872	CH 5	15993
296	CH 6	17268	874	CH 6	17276
298	CH 7	15764	876	CH 7	15762
300	CH 8	16843	878	CH 8	16837
302	CH 9	16524	880	CH 9	16520
304	CH 10	16767	882	CH 10	16768
306	CH 11	18213	884	CH 11	18205
308	CH 12	18430	886	CH 12	18417
310	CH 13	18156	888	CH 13	18172
312	CH 14	20266	890	CH 14	20269
314	CH 15	16680	892	CH 15	16678
316	REFLECTOR 1 POSITION 10	15893	894	REFLECTOR 1 POSITION 27	2084
318	REFLECTOR 2 POSITION 10	15538	896	REFLECTOR 2 POSITION 27	1731
320	REFL 1 POS 10 2ND LOOK	15884	898	REFL 1 POS 27 2ND LOOK	2079
322	REFL 2 POS 10 2ND LOOK	15533	900	REFL 2 POS 27 2ND LOOK	1726
324	SCENE DATA BP 10	16083	902	SCENE DATA BP 27	16078
326	CH 4	16693	904	CH 4	16700
328	CH 5	16000	906	CH 5	16004
330	CH 6	17267	908	CH 6	17271
332	CH 7	15765	910	CH 7	15765
334	CH 8	16845	912	CH 8	16857
336	CH 9	16521	914	CH 9	16522
338	CH 10	16765	916	CH 10	16766
340	CH 11	18208	918	CH 11	18207
342	CH 12	18413	920	CH 12	18415
344	CH 13	18149	922	CH 13	18160
346	CH 14	20263	924	CH 14	20273
348	CH 15	16679	926	CH 15	16680
350	REFLECTOR 1 POSITION 11	16041	928	REFLECTOR 1 POSITION 28	2237
352	REFLECTOR 2 POSITION 11	15687	930	REFLECTOR 2 POSITION 28	1884
354	REFL 1 POS 11 2ND LOOK	16035	932	REFL 1 POS 28 2ND LOOK	2230
356	REFL 2 POS 11 2ND LOOK	15684	934	REFL 2 POS 28 2ND LOOK	1879
358	SCENE DATA BP 11	16092	936	SCENE DATA BP 28	16091
360	CH 3	16692	938	CH 3	16710
362	CH 4	15997	940	CH 4	16025
364	CH 5	17272	942	CH 5	17274
366	CH 6	15764	944	CH 6	15764
368	CH 7	16843	946	CH 7	16855
370	CH 8	16524	948	CH 8	16514
372	CH 9	16761	950	CH 9	16764
374	CH 10	18209	952	CH 10	18206
376	CH 11	18426	954	CH 11	18417
378	CH 12	18165	956	CH 12	18151
380	CH 13	20277	958	CH 13	20280
382	CH 14	16679	960	CH 14	16678
384	CH 15	16196	962	CH 15	2387
386	REFLECTOR 1 POSITION 12	15839	964	REFLECTOR 1 POSITION 29	2035
388	REFLECTOR 2 POSITION 12	16188	966	REFLECTOR 2 POSITION 29	2382
390	REFL 1 POS 12 2ND LOOK	15835	968	REFL 1 POS 29 2ND LOOK	2030
392	REFL 2 POS 12 2ND LOOK	16076	970	REFL 2 POS 29 2ND LOOK	16160
	SCENE DATA BP 12			SCENE DATA BP 29	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16692	972	CH 4	16749
396	CH 5	16002	974	CH 5	16036
398	CH 6	17274	976	CH 6	17266
400	CH 7	15768	978	CH 7	15763
402	CH 8	16842	980	CH 8	16900
404	CH 9	16521	982	CH 9	16522
406	CH 10	16770	984	CH 10	16770
408	CH 11	18204	986	CH 11	18210
410	CH 12	18414	988	CH 12	18421
412	CH 13	18168	990	CH 13	18170
414	CH 14	20280	992	CH 14	20286
416	CH 15	16680	994	CH 15	16679
418	REFLECTOR 1 POSITION 13	16349	996	REFLECTOR 1 POSITION 30	2541
420	REFLECTOR 2 POSITION 13	15991	998	REFLECTOR 2 POSITION 30	2185
422	REFL 1 POS 13 2ND LOOK	16340	1000	REFL 1 POS 30 2ND LOOK	2534
424	REFL 2 POS 13 2ND LOOK	15986	1002	REFL 2 POS 30 2ND LOOK	2180
426	SCENE DATA BP 13	16111	1004	SCENE DATA BP 30	16066
428	CH 3	16719	1006	CH 3	16703
430	CH 4	16017	1008	CH 4	16006
432	CH 5	17305	1010	CH 5	17270
434	CH 6	15794	1012	CH 6	15762
436	CH 7	16856	1014	CH 7	16846
438	CH 8	16550	1016	CH 8	16520
440	CH 9	16791	1018	CH 9	16763
442	CH 10	18231	1020	CH 10	18211
444	CH 11	18468	1022	CH 11	18412
446	CH 12	18213	1024	CH 12	18156
448	CH 13	20349	1026	CH 13	20262
450	CH 14	16699	1028	CH 14	16679
452	CH 15	115	1030	CH 15	4132
454	REFLECTOR 1 POSITION 14	16139	1032	REFLECTOR 1 COLD CAL POS	3780
456	REFLECTOR 2 POSITION 14	108	1034	REFLECTOR 2 COLD CAL POS	4132
458	REFL 1 POS 14 2ND LOOK	16138	1036	REFL 1 COLD CAL 2ND LOOK	3780
460	REFL 2 POS 14 2ND LOOK	16093	1038	REFL 2 COLD CAL 2ND LOOK	16084
462	SCENE DATA BP 14	16709	1040	COLD CAL DATA 1	16708
464	CH 3	16015	1042	CH 3	16011
466	CH 4	17286	1044	CH 4	17267
468	CH 5	15785	1046	CH 5	15762
470	CH 6	16862	1048	CH 6	16840
472	CH 7	16542	1050	CH 7	16521
474	CH 8	16788	1052	CH 8	16760
476	CH 9	18228	1054	CH 9	18205
478	CH 10	18446	1056	CH 10	18419
480	CH 11	18186	1058	CH 11	18138
482	CH 12	20274	1060	CH 12	20260
484	CH 13	16698	1062	CH 13	16676
486	CH 14	265	1064	CH 14	16083
488	REFLECTOR 1 POSITION 15	16295	1066	REFLECTOR 1 COLD CAL DATA 2	16709
490	REFLECTOR 2 POSITION 15	260	1068	REFLECTOR 2 COLD CAL DATA 2	16012
492	REFL 1 POS 15 2ND LOOK	16290	1070	REFL 1 POS 30 2ND LOOK	17268
	REFL 2 POS 15 2ND LOOK			REFL 2 POS 30 2ND LOOK	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	SCENE DATA BP 15	CH 3	1072		CH 7
496		CH 4	16074		CH 8
498		CH 5	16724		CH 9
500		CH 6	16034		CH 10
502		CH 7	17284		CH 11
504		CH 8	15787		CH 12
506		CH 9	16856		CH 13
508		CH 10	16550		CH 14
510		CH 11	16793		CH 15
512		CH 12	18238	REFLECTOR 1 WARM CAL POS	8527
514		CH 13	18463	REFLECTOR 2 WARM CAL POS	8178
516		CH 14	18213	REFL 1 WARM CAL 2ND LOOK	8527
518		CH 15	20324	REFL 2 WARM CAL 2ND LOOK	8179
520	REFLECTOR 1 POSITION 16	CH 16	16702	WARM CAL DATA 1	16066
522	REFLECTOR 2 POSITION 16	CH 17	421		16682
524	REFL 1 POS 16 2ND LOOK	CH 18	60		15981
526	REFL 2 POS 16 2ND LOOK	CH 19	410		17265
528	SCENE DATA BP 16	CH 20	57		15758
530		CH 21	16072		16828
532		CH 22	16728		16512
534		CH 23	16022		16757
536		CH 24	17292		18198
538		CH 25	15780		18422
540		CH 26	16857		18154
542		CH 27	16542		20260
544		CH 28	16782		16672
546		CH 29	18234		16066
548		CH 30	18451		16682
550		CH 31	18204		15983
552		CH 32	20319		17262
554	REFLECTOR 1 POSITION 17	CH 33	16693		15758
556	REFLECTOR 2 POSITION 17	CH 34	572		16830
558	REFL 1 POS 17 2ND LOOK	CH 35	213		16520
560	REFL 2 POS 17 2ND LOOK	CH 36	562		16757
562	SCENE DATA BP 17	CH 37	210		18197
564		CH 38	16084		18409
566		CH 39	16707		18143
568		CH 40	16006		20250
570		CH 41	17283		16671
		CH 42	15786		

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE	DEG C
1090	SCAN MOTOR A1-1	17396		21.80
1092	SCAN MOTOR A1-2	18430		23.05
1094	FEED HORN A1-1	18756		24.71
1096	FEED HORN A1-2	19754		26.66
1098	RF MUX A1-1	20231		27.37
1100	RF MUX A1-2	21342		29.60
1102	LOCAL OSCILLATOR CHANNEL 3	22172		31.45
1104	LOCAL OSCILLATOR CHANNEL 4	22586		31.55
1106	LOCAL OSCILLATOR CHANNEL 5	21610		30.33
1108	LOCAL OSCILLATOR CHANNEL 6	20787		27.82
1110	LOCAL OSCILLATOR CHANNEL 7	20880		28.69
1112	LOCAL OSCILLATOR CHANNEL 8	22067		31.06
1114	LOCAL OSCILLATOR CHANNEL 15	21931		30.35
1116	PLLO #2	20176		27.29
1118	PLLO #1	23112		32.98
1120	1553 INTERFACE	16107		32.41
1122	MIXER/IF AMPLIFIER CHANNEL 3	21594		29.97
1124	MIXER/IF AMPLIFIER CHANNEL 4	21771		29.93
1126	MIXER/IF AMPLIFIER CHANNEL 5	21486		29.77
1128	MIXER/IF AMPLIFIER CHANNEL 6	20508		27.91
1130	MIXER/IF AMPLIFIER CHANNEL 7	20437		28.33
1132	MIXER/IF AMPLIFIER CHANNEL 8	21672		30.06
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	19982		27.13
1136	MIXER/IF AMPLIFIER CHANNEL 15	21673		30.38
1138	IF AMPLIFIER CHANNEL 11 THRU 14	21457		29.37
1140	IF AMPLIFIER CHANNEL 9	21618		28.85
1142	IF AMPLIFIER CHANNEL 10	21484		29.96
1144	IF AMPLIFIER CHANNEL 11	20579		27.36
1146	DC/DC CONVERTER	23678		33.35
1148	IF AMPLIFIER CHANNEL 13	20184		26.74
1150	IF AMPLIFIER CHANNEL 14	20540		27.87
1152	IF AMPLIFIER CHANNEL 12	20334		27.26
1154	RF SHELF A1-1	20991		28.82
1156	RF SHELF A1-2	21505		29.17
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	19063		25.17
1160	A1-1 WARM LOAD 1	22463		21.97
1162	A1-1 WARM LOAD 2	22949		22.06
1164	A1-1 WARM LOAD 3	22449		22.09
1166	A1-1 WARM LOAD 4	22532		22.08
1168	A1-1 WARM LOAD CENTER	22725		22.07
1170	A1-2 WARM LOAD 1	23443		23.36
1172	A1-2 WARM LOAD 2	23499		23.38
1174	A1-2 WARM LOAD 3	23509		23.36
1176	A1-2 WARM LOAD 4	23505		23.26
1178	A1-2 WARM LOAD CENTER	23505		23.36
1180	TEMP SENSOR REFERENCE VOLTAGE	25263		

DESCRIPTION	STATUS	
ANTENNA IN FULL SCAN MODE	YES	
ANTENNA IN WARM CAL MODE	NO	
ANTENNA IN COLD CAL MODE	NO	
ANTENNA IN NADIR MODE	NO	
COLD CAL. POSITION LSB	ZERO	
COLD CAL. POSITION MSB	ZERO	
PLO REDUNDANCY	PLLO # 1	
SCANNER A1-1 POWER	ON	
SCANNER A1-2 POWER	ON	
PLLO #1 LOCK	YES	
PLLO #2 LOCK	OFF	
ADC LATCHUP FLAG	ONE	
ENGINEERING DATA		
DESCRIPTION	DEG C	
A1-1 SCANNER MOTOR TEMPERATURE	21.5	
A1-1 RF SHELF TEMPERATURE #1	26.1	
A1-1 WARM LOAD TEMPERATURE	21.5	
A1-2 SCANNER MOTOR TEMPERATURE	23.3	
A1-2 RF SHELF TEMPERATURE #1	29.6	
A1-2 WARM LOAD TEMPERATURE	22.9	
A1-1 RF SHELF TEMPERATURE #2	26.0	
A1-2 RF SHELF TEMPERATURE #2	29.3	
DESCRIPTION	MA/VOLTS	
SIGNAL PROCESSOR	22048	4.9
	21819	15.1
	21797	-15.0
SCAN DRIVE	22112	4.9
	22085	15.0
	21835	-15.1
PLO	22565	14.8
	22077	-15.2
RECEIVER	21822	7.9
MIXER/IF AMPLIFIER A1-1	21419	10.0
A1-2	21432	10.0
LO CHANNEL 6	21397	10.0
7	21446	10.0
SPARE	32767	327.7
LO CHANNEL 3	21249	10.1
4	21177	10.1
5	21396	10.0
8	21314	10.0
15	22010	15.0
QUIET BUS CURRENT	16239	2231.6
A1-1 NOISY POWER BUS CURRENT	17773	56.9
A1-2 NOISY POWER BUS CURRENT	16654	53.2

## PRT TEMPERATURES

## VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

## FIXED TARGET

## BASEPLATE

## THERMOCOUPLE TEMPERATURES

## FIXED TARGET SHROUD

## VARIABLE TARGET SHROUD

## FIXED TARGET N2

## VARIABLE TARGET N2

## HEATER N2

## FIXED TARGET FLOW METER

## VARIABLE TARGET FLOW METER

## BASEPLATE HEATER N2

## BASEPLATE N2

## BASEPLATE FLOW METER

## ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00



TAR # 00434 Op. 8030

**TEST DATA SHEET NO. 10** (Sheet 1 of 2)  
Science and Engineering Data Test (Warm Cal Mode) (Paragraph 3.3.5.3.2)

Step	Instrument Status	(Y)es / (N)o
1	Warm Cal Mode command received?	Yes
2	ENGR OK message seen?	Yes
3	Both reflectors positioned at warm loads?	Yes

Yes = Pass No = Fail

Step	Element	Description	Measured Value* (Binary)	Required Value (Binary)	(P)ass/(F)ail
4a	1-2	Packet ID		0000100100000011	Pass
4b	3-4	Packet Length		0000001010111111	Pass
4c	5-6	Unit Serial Number		0000001100000000	Pass
4d	7-8	Instrument Mode/ Status		1001101000000100	Pass

RADIOMETER SCENE DATA			
Step	Description	Required Counts	(P)ass/(F)ail
4f	Review All Scene Data	12500-20500	Pass

PRT TEMPERATURE DATA				
Step	Element	Description	Required	(P)ass/(F)ail
4g	1090-1178	Review All PRT Data**	10-40 degrees C	Pass
4g	1180	Temperature Sensor Reference	23244-26317 counts	Pass

STATUS				
Step	Description	Status*	Required Status	(P)ass/(F)ail
4h	Antenna in Full Scan Mode		NO	Pass
	Antenna in Warm Cal Mode		YES	
	Antenna in Cold Cal Mode		NO	
	Antenna in Nadir Mode		NO	
	Cold Cal Position LSB		ZERO	
	Cold Cal Position MSB		ZERO	
	PLO Redundancy		PLO #1	
	Scanner A1-1 Power		ON	
	Scanner A1-2 Power		ON	
	PLO #1 Lock		YES	
	PLO #2 Lock		OFF	
	ADC Latchup Flag		ONE	Pass

\* Rewriting printout data on this data sheet is optional.

\*\* Refer to Table IV for PRT Data Description

EOS/AMSU-A1 System P/N 1356008  
Circle Test: 1<sup>st</sup> CPT Final CPT

Shop Order: 560863  
Sub CPT \_\_\_\_\_

S/N: 202

LPT \_\_\_\_\_

J. S. [Signature] 11/24/98  
Customer Representative Date

Ken Shaw 11/19/98  
Test Systems Engineer Date  
NOV 19 1998  
Quality Control Date



TAR \*00434 Op 8030

AE-26156/9A  
19 Aug 98

**TEST DATA SHEET NO. 10 (Sheet 2 of 2)**  
**Science and Engineering Data Test (Warm Cal Mode) (Paragraph 3.3.5.3.2)**

REFLECTOR POSITIONS (Step 4e)						
BP	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
1-30		8528	Pass		8176	Pass
* Actual range (min to max) of counts from printout (Only beam positions 1-30). Rewriting counts on this data sheet is optional. ** Required counts from AE26002/1 TDS 5&6 $\pm 5$ counts for warm calibration position						

ENGINEERING DATA				
Step	Description	Measured***	Required	(P)ass/(F)ail
4i	Signal Processor (+5 VDC)		+4 to +6 volts	Pass
	Signal Processor (+15 VDC)		+14 to +16 volts	
	Signal Processor (-15 VDC)		-14 to -16 volts	
	Scan Drive (+5 VDC)		+4 to +6 volts	
	Scan Drive (+15 VDC)		+14 to +16 volts	
	Scan Drive (-15 VDC)		-14 to -16 volts	
	PLO (+15 VDC)		+14 to +16 volts	
	PLO (-15 VDC)		-14 to -16 volts	
	Receiver (+8 VDC)		+7 to +9 volts	
	Mixer/IF Amplifier A1-1 (+10 VDC)		+9 to +11 volts	
	Mixer/IF Amplifier A1-2 (+10 VDC)		+9 to +11 volts	
	LO Channel 6		+9 to +11 volts	
	LO Channel 7		+9 to +11 volts	
	LO Channel 3		+9 to +11 volts	
	LO Channel 4		+9 to +11 volts	
	LO Channel 5		+9 to +11 volts	
	LO Channel 8		+9 to +11 volts	
	LO Channel 15		+14 to +16 volts	
	Quiet Bus Current		$\leq 3$ Amps	
	A1-1 Noisy Bus Current		$\leq 125$ milliamps	
	A1-2 Noisy Bus Current		$\leq 125$ milliamps	Pass

\*\*\* Rewriting printout data on this data sheet is optional.

Op 0580

EOS/AMSU-A1 System P/N 1356008

Shop Order: 560863

S/N: 202

Circle Test: 1<sup>st</sup> CPT

Final CPT

Sub CPT

LPT

*[Signature]*  
 Customer Representative

11/24/98

Date

*[Signature]*  
 Test Systems Engineer

CCO  
 72

11/19/98

Date NOV 19 1998

Quality Control

Date



EOS	A1-03	..EXE;41	WARM CAL MODE	P1	19-NOV-98	11:00:44	AN NUMBER	687
[ 5 ]	SCIENCE	DATA	ELEMENT 0000					
[ 6 ]	CONTROL/STATUS	ELEMENT	00					
[ 7 ]	ENGINEERING	ELEMENT	00					
		COMMANDS						
[ 9 ]	SCANNER A1-1	POWER =	ON				PLLO#1 [ 15 ]	
[ 10 ]	SCANNER A1-2	POWER =	ON					
[ 11 ]	ANTENNA FULL	SCAN MODE =	NO					
[ 12 ]		WARM CAL	= YES					
[ 13 ]		COLD CAL	= NO					
[ 14 ]		NADIR	= NO					
ENGR OK	POWER	ON	CHECKSUM IN 182B CALC 182B	SA28			688 SA29 1364	
		SCREEN ONLY [ 2 ]	PRINT [ 3 ]	FULL			[ 1 ] RETURN	
	SELECT BUTTON 3							

Data in support of 3353.2 Steps 1-5  
 EOS A1 S/N 202, S/0560863 Op 0580  
 TAR 00434 Op 2030

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	WARM CAL SAMPLE 17	16746
2		00000011	574	CH 8	16481
3	PACKET LENGTH	00000010	576	CH 9	16669
4		10111111	578	CH 10	17949
5	UNIT SERIAL NUMBER	00000011	580	CH 11	18150
6		00000000	582	CH 12	17845
7	INSTRUMENT MODE/STATUS	10011010	584	CH 13	19901
8		00000100	586	CH 14	16598
10	REFLECTOR 1 POSITION	8525	588	CH 15	8525
12	REFLECTOR 2 POSITION	8177	590	REFLECTOR 1 POSITION 18	8177
14	REFL 1 POS 1 2ND LOOK	8525	592	REFLECTOR 2 POSITION 18	8525
16	REFL 2 POS 1 2ND LOOK	8177	594	REFL 1 POS 18 2ND LOOK	8525
18	WARM CAL SAMPLE 1	16035	596	REFL 2 POS 18 2ND LOOK	8177
20	CH 3	16577	598	WARM CAL SAMPLE 18	16035
22	CH 4	15858	600	CH 3	16578
24	CH 5	17219	602	CH 4	15859
26	CH 6	15645	604	CH 5	17218
28	CH 7	16746	606	CH 6	15642
30	CH 8	16483	608	CH 7	16746
32	CH 9	16666	610	CH 8	16479
34	CH 10	17948	612	CH 9	16665
36	CH 11	18159	614	CH 10	17949
38	CH 12	17858	616	CH 11	18150
40	CH 13	19906	618	CH 12	17853
42	CH 14	16597	620	CH 13	19914
44	CH 15	8525	622	CH 14	16598
46	REFLECTOR 1 POSITION 2	8177	624	CH 15	8525
48	REFLECTOR 2 POSITION 2	8525	626	REFLECTOR 1 POSITION 19	8177
50	REFL 1 POS 2 2ND LOOK	8177	628	REFLECTOR 2 POSITION 19	8525
52	REFL 2 POS 2 2ND LOOK	16031	630	REFL 1 POS 19 2ND LOOK	8177
54	WARM CAL SAMPLE 2	16579	632	REFL 2 POS 19 2ND LOOK	16040
56	CH 3	15861	634	WARM CAL SAMPLE 19	16577
58	CH 4	17217	636	CH 3	15858
60	CH 5	15645	638	CH 4	17217
62	CH 6	16751	640	CH 5	15645
64	CH 7	16478	642	CH 6	16747
66	CH 8	16677	644	CH 7	15645
68	CH 9	17945	646	CH 8	16747
70	CH 10	18149	648	CH 9	16481
72	CH 11	17872	650	CH 10	16666
74	CH 12	19915	652	CH 11	17955
76	CH 13	16599	654	CH 12	18149
78	CH 14	8525	656	CH 13	17858
80	CH 15	8177	658	CH 14	19902
82	REFLECTOR 1 POSITION 3	8525	660	CH 15	16598
84	REFLECTOR 2 POSITION 3	8525	662	REFLECTOR 1 POSITION 20	8525
86	REFL 1 POS 3 2ND LOOK	8177	664	REFLECTOR 2 POSITION 20	8177
88	REFL 2 POS 3 2ND LOOK	16038	666	REFL 1 POS 20 2ND LOOK	8525
90	WARM CAL SAMPLE 3	16575	668	REFL 2 POS 20 2ND LOOK	8177
92	CH 3	15859	670	WARM CAL SAMPLE 20	16036
	CH 4	17220		CH 3	16576
	CH 5			CH 4	15859
	CH 6			CH 5	17219

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15647	672	CH 7	15645
96	CH 8	16742	674	CH 8	16743
98	CH 9	16480	676	CH 9	16482
100	CH 10	16669	678	CH 10	16670
102	CH 11	17947	680	CH 11	17950
104	CH 12	18146	682	CH 12	18152
106	CH 13	17848	684	CH 13	17869
108	CH 14	19917	686	CH 14	19904
110	CH 15	16598	688	CH 15	16597
112	REFLECTOR 1 POSITION 4	8525	690	REFLECTOR 1 POSITION 21	8525
114	REFLECTOR 2 POSITION 4	8177	692	REFLECTOR 2 POSITION 21	8177
116	REFL 1 POS 4 2ND LOOK	8525	694	REFL 1 POS 21 2ND LOOK	8525
118	REFL 2 POS 4 2ND LOOK	8177	696	REFL 2 POS 21 2ND LOOK	8177
120	WARM CAL SAMPLE 4	16035	698	WARM CAL SAMPLE 21	16035
122	CH 3	16575	700	CH 3	16578
124	CH 4	15858	702	CH 4	15858
126	CH 5	17217	704	CH 5	17218
128	CH 6	15651	706	CH 6	15649
130	CH 7	16746	708	CH 7	16747
132	CH 8	16484	710	CH 8	16479
134	CH 9	16668	712	CH 9	16664
136	CH 10	17950	714	CH 10	17947
138	CH 11	18157	716	CH 11	18149
140	CH 12	17866	718	CH 12	17859
142	CH 13	19904	720	CH 13	19929
144	CH 14	16597	722	CH 14	16596
146	CH 15	8525	724	CH 15	8525
148	REFLECTOR 1 POSITION 5	8177	726	REFLECTOR 1 POSITION 22	8177
150	REFLECTOR 2 POSITION 5	8525	728	REFLECTOR 2 POSITION 22	8525
152	REFL 1 POS 5 2ND LOOK	8177	730	REFL 1 POS 22 2ND LOOK	8177
154	REFL 2 POS 5 2ND LOOK	16034	732	REFL 2 POS 22 2ND LOOK	16032
156	WARM CAL SAMPLE 5	16577	734	WARM CAL SAMPLE 22	16578
158	CH 3	15856	736	CH 3	15859
160	CH 4	17218	738	CH 4	17214
162	CH 5	15644	740	CH 5	15649
164	CH 6	16748	742	CH 6	16748
166	CH 7	16482	744	CH 7	16481
168	CH 8	16673	746	CH 8	16673
170	CH 9	17949	748	CH 9	17948
172	CH 10	18159	750	CH 10	18153
174	CH 11	17843	752	CH 11	17843
176	CH 12	19903	754	CH 12	19900
178	CH 13	16599	756	CH 13	16599
180	CH 14	8525	758	CH 14	8525
182	CH 15	8177	760	CH 15	8177
184	REFLECTOR 1 POSITION 6	8525	762	REFLECTOR 1 POSITION 23	8525
186	REFLECTOR 2 POSITION 6	8177	764	REFLECTOR 2 POSITION 23	8177
188	REFL 1 POS 6 2ND LOOK	16032	766	REFL 1 POS 23 2ND LOOK	16032
190	REFL 2 POS 6 2ND LOOK	16575	768	REFL 2 POS 23 2ND LOOK	16577
192	WARM CAL SAMPLE 6	15860	770	WARM CAL SAMPLE 23	15859

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17217	772	CH 6	17216
196	CH 7	15647	774	CH 7	15647
198	CH 8	16745	776	CH 8	16746
200	CH 9	16480	778	CH 9	16483
202	CH 10	16673	780	CH 10	16667
204	CH 11	17954	782	CH 11	17950
206	CH 12	18144	784	CH 12	18143
208	CH 13	17865	786	CH 13	17850
210	CH 14	19922	788	CH 14	19915
212	CH 15	16598	790	CH 15	16597
214	REFLECTOR 1 POSITION 7	8525	792	REFLECTOR 1 POSITION 24	8525
216	REFLECTOR 2 POSITION 7	8177	794	REFLECTOR 2 POSITION 24	8177
218	REFL 1 POS 7 2ND LOOK	8525	796	REFL 1 POS 24 2ND LOOK	8525
220	REFL 2 POS 7 2ND LOOK	8177	798	REFL 2 POS 24 2ND LOOK	8177
222	WARM CAL SAMPLE 7	16035	800	WARM CAL SAMPLE 24	16033
224	CH 3	16576	802	CH 3	16580
226	CH 4	15860	804	CH 4	15860
228	CH 5	17216	806	CH 5	17217
230	CH 6	15646	808	CH 6	15649
232	CH 7	16751	810	CH 7	16751
234	CH 8	16484	812	CH 8	16481
236	CH 9	16671	814	CH 9	16667
238	CH 10	17953	816	CH 10	17951
240	CH 11	18155	818	CH 11	18144
242	CH 12	17855	820	CH 12	17848
244	CH 13	19916	822	CH 13	19909
246	CH 14	16597	824	CH 14	16600
248	CH 15	8525	826	CH 15	8525
250	REFLECTOR 1 POSITION 8	8177	828	REFLECTOR 1 POSITION 25	8177
252	REFLECTOR 2 POSITION 8	8525	830	REFLECTOR 2 POSITION 25	8525
254	REFL 1 POS 8 2ND LOOK	8177	832	REFL 1 POS 25 2ND LOOK	8177
256	REFL 2 POS 8 2ND LOOK	16033	834	REFL 2 POS 25 2ND LOOK	16032
258	WARM CAL SAMPLE 8	16574	836	WARM CAL SAMPLE 25	16574
260	CH 3	15862	838	CH 3	15859
262	CH 4	17219	840	CH 4	17222
264	CH 5	15647	842	CH 5	15649
266	CH 6	16748	844	CH 6	16744
268	CH 7	16482	846	CH 7	16482
270	CH 8	16666	848	CH 8	16667
272	CH 9	17942	850	CH 9	17945
274	CH 10	18156	852	CH 10	18161
276	CH 11	17855	854	CH 11	17866
278	CH 12	19921	856	CH 12	19933
280	CH 13	16597	858	CH 13	16597
282	CH 14	8525	860	CH 14	8525
284	CH 15	8177	862	CH 15	8177
286	REFLECTOR 1 POSITION 9	8525	864	REFLECTOR 2 POSITION 26	8525
288	REFL 1 POS 9 2ND LOOK	8177	866	REFL 1 POS 26 2ND LOOK	8177
290	REFL 2 POS 9 2ND LOOK	16034	868	REFL 2 POS 26 2ND LOOK	16035
292	WARM CAL SAMPLE 9	16579	870	WARM CAL SAMPLE 26	16580



ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15858	872	REFLECTOR 1 POSITION 27	8525
296	CH 6	17218	874	REFLECTOR 2 POSITION 27	8177
298	CH 7	15643	876	REFL 1 POS 27 2ND LOOK	8525
300	CH 8	16747	878	REFL 2 POS 27 2ND LOOK	8177
302	CH 9	16481	880	WARM CAL SAMPLE 27	16031
304	CH 10	16666	882	CH 3	16574
306	CH 11	17957	884	CH 4	15858
308	CH 12	18154	886	CH 5	17218
310	CH 13	17847	888	CH 6	15642
312	CH 14	19912	890	CH 7	16747
314	CH 15	16598	892	CH 8	16483
316	REFLECTOR 1 POSITION 10	8525	894	CH 9	16670
318	REFLECTOR 2 POSITION 10	8177	896	CH 10	16670
320	REFL 1 POS 10 2ND LOOK	8525	898	CH 11	17942
322	REFL 2 POS 10 2ND LOOK	8177	900	CH 12	18153
324	WARM CAL SAMPLE 10	16033	902	CH 13	17842
326	CH 3	16575	904	CH 14	19936
328	CH 4	15861	906	CH 15	16598
330	CH 5	17218	908	REFLECTOR 1 POSITION 28	8525
332	CH 6	15649	910	REFLECTOR 2 POSITION 28	8177
334	CH 7	16750	912	REFL 1 POS 28 2ND LOOK	8525
336	CH 8	16481	914	REFL 2 POS 28 2ND LOOK	8177
338	CH 9	16676	916	WARM CAL SAMPLE 28	16035
340	CH 10	17949	918	CH 3	16580
342	CH 11	18155	920	CH 4	15859
344	CH 12	17860	922	CH 5	17214
346	CH 13	19910	924	CH 6	15646
348	CH 14	16599	926	CH 7	16748
350	CH 15	8525	928	CH 8	16478
352	REFLECTOR 1 POSITION 11	8177	930	CH 9	16671
354	REFLECTOR 2 POSITION 11	8525	932	CH 10	17945
356	REFL 1 POS 11 2ND LOOK	8177	934	CH 11	18155
358	REFL 2 POS 11 2ND LOOK	16029	936	CH 12	17856
360	WARM CAL SAMPLE 11	16577	938	CH 13	19915
362	CH 3	15859	940	CH 14	16598
364	CH 4	17220	942	CH 15	8525
366	CH 5	15646	944	REFLECTOR 1 POSITION 29	8177
368	CH 6	16750	946	REFLECTOR 2 POSITION 29	8525
370	CH 7	16484	948	REFL 1 POS 29 2ND LOOK	8177
372	CH 8	16674	950	REFL 2 POS 29 2ND LOOK	16034
374	CH 9	17947	952	WARM CAL SAMPLE 29	16034
376	CH 10	18152	954	CH 3	
378	CH 11	17861	956	CH 4	
380	CH 12	19910	958	CH 5	
382	CH 13	16596	960	CH 6	
384	CH 14	8525	962	CH 7	
386	CH 15	8177	964	CH 8	
388	REFLECTOR 1 POSITION 12	8177	966	CH 9	
390	REFLECTOR 2 POSITION 12	8525	968	CH 10	
392	REFL 1 POS 12 2ND LOOK	8177	970	CH 11	
	REFL 2 POS 12 2ND LOOK	16035		CH 12	
	WARM CAL SAMPLE 12			CH 13	
	CH 3			CH 14	
	CH 4			CH 15	
	CH 5				
	CH 6				
	CH 7				
	CH 8				
	CH 9				
	CH 10				
	CH 11				
	CH 12				
	CH 13				
	CH 14				
	CH 15				
	REFLECTOR 1 POSITION 12				
	REFLECTOR 2 POSITION 12				
	REFL 1 POS 12 2ND LOOK				
	REFL 2 POS 12 2ND LOOK				
	WARM CAL SAMPLE 12				
	CH 3				

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16579	972	CH 4	16578
396	CH 5	15860	974	CH 5	15855
398	CH 6	17217	976	CH 6	17218
400	CH 7	15651	978	CH 7	15649
402	CH 8	16745	980	CH 8	16747
404	CH 9	16480	982	CH 9	16482
406	CH 10	16668	984	CH 10	16670
408	CH 11	17948	986	CH 11	17951
410	CH 12	18149	988	CH 12	18144
412	CH 13	17857	990	CH 13	17845
414	CH 14	19925	992	CH 14	19902
416	CH 15	16598	994	CH 15	16598
418	REFLECTOR 1 POSITION 13	8525	996	REFLECTOR 1 POSITION 30	8525
420	REFLECTOR 2 POSITION 13	8177	998	REFLECTOR 2 POSITION 30	8177
422	REFL 1 POS 13 2ND LOOK	8525	1000	REFL 1 POS 30 2ND LOOK	8525
424	REFL 2 POS 13 2ND LOOK	8177	1002	REFL 2 POS 30 2ND LOOK	8177
426	WARM CAL SAMPLE 13	16041	1004	WARM CAL SAMPLE 30	16032
428	CH 3	16577	1006	CH 3	16578
430	CH 4	15859	1008	CH 4	15859
432	CH 5	17222	1010	CH 5	17218
434	CH 6	15649	1012	CH 6	15647
436	CH 7	16749	1014	CH 7	16752
438	CH 8	16480	1016	CH 8	16484
440	CH 9	16668	1018	CH 9	16669
442	CH 10	17954	1020	CH 10	17949
444	CH 11	18151	1022	CH 11	18152
446	CH 12	17861	1024	CH 12	17861
448	CH 13	19917	1026	CH 13	19925
450	CH 14	16598	1028	CH 14	16597
452	CH 15	8525	1030	CH 15	OE
454	REFLECTOR 1 POSITION 14	8177	1032	REFLECTOR 1 COLD CAL POS	OE
456	REFLECTOR 2 POSITION 14	8525	1034	REFLECTOR 2 COLD CAL POS	OE
458	REFL 1 POS 14 2ND LOOK	8177	1036	REFL 1 COLD CAL 2ND LOOK	OE
460	REFL 2 POS 14 2ND LOOK	16034	1038	REFL 2 COLD CAL 2ND LOOK	OE
462	WARM CAL SAMPLE 14	16574	1040	COLD CAL DATA 1	0
464	CH 3	15854	1042	CH 3	0
466	CH 4	17217	1044	CH 4	0
468	CH 5	15644	1046	CH 5	0
470	CH 6	16745	1048	CH 6	0
472	CH 7	16479	1050	CH 7	0
474	CH 8	16667	1052	CH 8	0
476	CH 9	17947	1054	CH 9	0
478	CH 10	18147	1056	CH 10	0
480	CH 11	17845	1058	CH 11	0
482	CH 12	19910	1060	CH 12	0
484	CH 13	16596	1062	CH 13	0
486	CH 14	8525	1064	CH 14	0
488	CH 15	8177	1066	CH 15	0
490	REFLECTOR 1 POSITION 15	8525	1068	REFLECTOR 1 COLD CAL DATA 2	0
492	REFLECTOR 2 POSITION 15	8177	1070	REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK			REFL 1 COLD CAL 2ND LOOK	0
	REFL 2 POS 15 2ND LOOK			REFL 2 COLD CAL 2ND LOOK	0

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	WARM CAL SAMPLE 15	CH 3	16041	1072	CH 7
496		CH 4	16577		CH 8
498		CH 5	15856	1074	CH 9
500		CH 6	17218	1076	CH 10
502		CH 7	15647	1078	CH 11
504		CH 8	16743	1080	CH 12
506		CH 9	16482	1082	CH 13
508		CH 10	16669	1084	CH 14
510		CH 11	17950	1086	CH 15
512		CH 12	18153	1088	
514		CH 13	17852	1182	REFLECTOR 1 WARM CAL POS
516		CH 14	19904	1184	REFLECTOR 2 WARM CAL POS
518		CH 15	16598	1186	REFL 1 WARM CAL 2ND LOOK
520	REFLECTOR 1 POSITION 16	CH 3	8525	1188	REFL 2 WARM CAL 2ND LOOK
522	REFLECTOR 2 POSITION 16	CH 4	8177	1190	WARM CAL DATA 1
524	REFL 1 POS 16 2ND LOOK	CH 5	8525	1192	
526	REFL 2 POS 16 2ND LOOK	CH 6	8177	1194	
528	WARM CAL SAMPLE 16	CH 7	16035	1196	
530		CH 8	16576	1198	
532		CH 9	15855	1200	
534		CH 10	17215	1202	
536		CH 11	15646	1204	
538		CH 12	16748	1206	
540		CH 13	16482	1208	
542		CH 14	16665	1210	
544		CH 15	17953	1212	
546		CH 16	18157	1214	
548		CH 17	17860	1216	
550		CH 18	19912	1218	
552		CH 19	16599	1220	
554	REFLECTOR 1 POSITION 17	CH 3	8525	1222	
556	REFLECTOR 2 POSITION 17	CH 4	8177	1224	
558	REFL 1 POS 17 2ND LOOK	CH 5	8525	1226	
560	REFL 2 POS 17 2ND LOOK	CH 6	8177	1228	
562	WARM CAL SAMPLE 17	CH 7	16032	1230	
564		CH 8	16578	1232	
566		CH 9	15859	1234	
568		CH 10	17218	1236	
570		CH 11	15646	1238	
		CH 12		1240	
		CH 13			
		CH 14			
		CH 15			
		CH 16			
		CH 17			
		CH 18			
		CH 19			
		CH 20			
		CH 21			
		CH 22			
		CH 23			
		CH 24			
		CH 25			
		CH 26			
		CH 27			
		CH 28			
		CH 29			
		CH 30			
		CH 31			
		CH 32			
		CH 33			
		CH 34			
		CH 35			
		CH 36			
		CH 37			
		CH 38			
		CH 39			
		CH 40			
		CH 41			
		CH 42			
		CH 43			
		CH 44			
		CH 45			
		CH 46			
		CH 47			
		CH 48			
		CH 49			
		CH 50			
		CH 51			
		CH 52			
		CH 53			
		CH 54			
		CH 55			
		CH 56			
		CH 57			
		CH 58			
		CH 59			
		CH 60			
		CH 61			
		CH 62			
		CH 63			
		CH 64			
		CH 65			
		CH 66			
		CH 67			
		CH 68			
		CH 69			
		CH 70			
		CH 71			
		CH 72			
		CH 73			
		CH 74			
		CH 75			
		CH 76			
		CH 77			
		CH 78			
		CH 79			
		CH 80			
		CH 81			
		CH 82			
		CH 83			
		CH 84			
		CH 85			
		CH 86			
		CH 87			
		CH 88			
		CH 89			
		CH 90			
		CH 91			
		CH 92			
		CH 93			
		CH 94			
		CH 95			
		CH 96			
		CH 97			
		CH 98			
		CH 99			
		CH 100			
		CH 101			
		CH 102			
		CH 103			
		CH 104			
		CH 105			
		CH 106			
		CH 107			
		CH 108			
		CH 109			
		CH 110			
		CH 111			
		CH 112			
		CH 113			
		CH 114			
		CH 115			
		CH 116			
		CH 117			
		CH 118			
		CH 119			
		CH 120			
		CH 121			
		CH 122			
		CH 123			
		CH 124			
		CH 125			
		CH 126			
		CH 127			
		CH 128			
		CH 129			
		CH 130			
		CH 131			
		CH 132			
		CH 133			
		CH 134			
		CH 135			
		CH 136			
		CH 137			
		CH 138			
		CH 139			
		CH 140			
		CH 141			
		CH 142			
		CH 143			
		CH 144			
		CH 145			
		CH 146			
		CH 147			
		CH 148			
		CH 149			
		CH 150			
		CH 151			
		CH 152			
		CH 153			
		CH 154			
		CH 155			
		CH 156			
		CH 157			
		CH 158			
		CH 159			
		CH 160			
		CH 161			
		CH 162			
		CH 163			
		CH 164			
		CH 165			
		CH 166			
		CH 167			
		CH 168			
		CH 169			
		CH 170			
		CH 171			
		CH 172			
		CH 173			
		CH 174			
		CH 175			
		CH 176			
		CH 177			
		CH 178			
		CH 179			
		CH 180			
		CH 181			
		CH 182			
		CH 183			
		CH 184			
		CH 185			
		CH 186			
		CH 187			
		CH 188			
		CH 189			
		CH 190			
		CH 191			
		CH 192			
		CH 193			
		CH 194			
		CH 195			
		CH 196			
		CH 197			
		CH 198			
		CH 199			
		CH 200			
		CH 201			
		CH 202			
		CH 203			
		CH 204			
		CH 205			
		CH 206			
		CH 207			
		CH 208			
		CH 209			
		CH 210			
		CH 211			
		CH 212			
		CH 213			
		CH 214			
		CH 215			
		CH 216			
		CH 217			
		CH 218			
		CH 219			
		CH 220			
		CH 221			
		CH 222			
		CH 223			
		CH 224			
		CH 225			
		CH 226			
		CH 227			
		CH 228			
		CH 229			
		CH 230			
		CH 231			
		CH 232			
		CH 233			
		CH 234			
		CH 235			
		CH 236			
		CH 237			
		CH 238			
		CH 239			
		CH 240			
		CH 241			
		CH 242			
		CH 243			
		CH 244			
		CH 245			
		CH 246			
		CH 247			
		CH 248			
		CH 249			
		CH 250			
		CH 251			
		CH 252			
		CH 253			
		CH 254			
		CH 255			
		CH 256			
		CH 257			
		CH 258			
		CH 259			
		CH 260			
		CH 261			
		CH 262			
		CH 263			
		CH 264			
		CH 265			
		CH 266			
		CH 267			
		CH 268			
		CH 269			
		CH 270			
		CH 271			
		CH 272			
		CH 273			
		CH 274			
		CH 275			
		CH 276			
		CH 277			
		CH 278			
		CH 279			
		CH 280			
		CH 281			
		CH 282			
		CH 283			
		CH 284			
		CH 285			
		CH 286			
		CH 287			
		CH 288			
		CH 289			
		CH 290			
		CH 291			
		CH 292			
		CH 293			
		CH 294			
		CH 295			
		CH 296			
		CH 297			
		CH 298			
		CH 299			
		CH 300			
		CH 301			
		CH 302			
		CH 303			
		CH 304			
		CH 305			
		CH 306			
		CH 307			
		CH 308			
		CH 309			
		CH 310			
		CH 311			</

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE	DEG C
1090	SCAN MOTOR A1-1	17678	22.33	
1092	SCAN MOTOR A1-2	18862	23.87	
1094	FEED HORN A1-1	19523	26.17	
1096	FEED HORN A1-2	20702	28.46	
1098	RF MUX A1-1	21260	29.34	
1100	RF MUX A1-2	22582	32.00	
1102	LOCAL OSCILLATOR CHANNEL 3	23450	33.90	
1104	LOCAL OSCILLATOR CHANNEL 4	23866	34.02	
1106	LOCAL OSCILLATOR CHANNEL 5	22796	32.60	
1108	LOCAL OSCILLATOR CHANNEL 6	21669	29.50	
1110	LOCAL OSCILLATOR CHANNEL 7	21941	30.74	
1112	LOCAL OSCILLATOR CHANNEL 8	23295	33.37	
1114	LOCAL OSCILLATOR CHANNEL 15	23018	32.43	
1116	PLLO #2	23018	29.33	
1118	PLLO #1	21243	35.06	
1120	1553 INTERFACE	24186	34.42	
1122	MIXER/IF AMPLIFIER CHANNEL 3	17152	32.49	
1124	MIXER/IF AMPLIFIER CHANNEL 4	22861	32.32	
1126	MIXER/IF AMPLIFIER CHANNEL 5	23025	32.07	
1128	MIXER/IF AMPLIFIER CHANNEL 6	22682	29.89	
1130	MIXER/IF AMPLIFIER CHANNEL 7	21545	30.40	
1132	MIXER/IF AMPLIFIER CHANNEL 8	21522	32.51	
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	22940	29.08	
1136	MIXER/IF AMPLIFIER CHANNEL 15	21007	32.47	
1138	IF AMPLIFIER CHANNEL 11 THRU 14	22762	31.62	
1140	IF AMPLIFIER CHANNEL 9	22537	31.42	
1142	IF AMPLIFIER CHANNEL 10	22707	32.06	
1144	IF AMPLIFIER CHANNEL 11	22569	29.39	
1146	DC/DC CONVERTER	21639	34.96	
1148	IF AMPLIFIER CHANNEL 13	24507	28.74	
1150	IF AMPLIFIER CHANNEL 14	21235	29.87	
1152	IF AMPLIFIER CHANNEL 12	21590	29.27	
1154	RF SHELFL A1-1	21390	30.80	
1156	RF SHELFL A1-2	22025	31.46	
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	22695	26.63	
1160	A1-1 WARM LOAD 1	19831	22.74	
1162	A1-1 WARM LOAD 2	22855	22.84	
1164	A1-1 WARM LOAD 3	23347	22.87	
1166	A1-1 WARM LOAD 4	22846	22.85	
1168	A1-1 WARM LOAD CENTER	22927	22.86	
1170	A1-2 WARM LOAD 1	23126	24.59	
1172	A1-2 WARM LOAD 2	24073	24.61	
1174	A1-2 WARM LOAD 3	24129	24.60	
1176	A1-2 WARM LOAD 4	24140	24.50	
1178	A1-2 WARM LOAD CENTER	24136	24.60	
1180	TEMP SENSOR REFERENCE VOLTAGE	24139	24.60	
		25266		

## DESCRIPTION

## STATUS

ANTENNA IN FULL SCAN MODE	NO
ANTENNA IN WARM CAL MODE	YES
ANTENNA IN COLD CAL MODE	NO
ANTENNA IN NADIR MODE	NO
COLD CAL. POSITION LSB	ZERO
COLD CAL. POSITION MSB	ZERO
PLO REDUNDANCY	PLLO # 1
SCANNER A1-1 POWER	ON
SCANNER A1-2 POWER	ON
PLLO #1 LOCK	YES
PLLO #2 LOCK	OFF
ADC LATCHUP FLAG	ONE

## ENGINEERING DATA

DESCRIPTION	VALUE	MA/VOLTS	DEG C
ENGINEERING DATA			
A1-1 SCANNER MOTOR TEMPERATURE			22.0
A1-1 RF SHELF TEMPERATURE #1			27.8
A1-1 WARM LOAD TEMPERATURE			22.2
A1-2 SCANNER MOTOR TEMPERATURE			24.1
A1-2 RF SHELF TEMPERATURE #1			31.9
A1-2 WARM LOAD TEMPERATURE			24.1
A1-1 RF SHELF TEMPERATURE #2			27.7
A1-2 RF SHELF TEMPERATURE #2			31.6
DESCRIPTION			
SIGNAL PROCESSOR	+5 VDC	22060	4.9
	+15 VDC	21823	15.1
	-15 VDC	21797	-15.0
SCAN DRIVE	+5 VDC	22160	4.9
	+15 VDC	22210	14.9
	-15 VDC	21848	-15.1
PLO	+15 VDC	22554	14.8
	-15 VDC	22077	-15.2
RECEIVER	+8 VDC	21816	7.9
MIXER/IF AMPLIFIER A1-1	+10 VDC	21416	10.0
A1-2	+10 VDC	21430	10.0
LO CHANNEL 6	+10 VDC	21392	10.0
7	+10 VDC	21435	10.0
SPARE		32767	327.7
LO CHANNEL 3	+10 VDC	21250	10.1
4	+10 VDC	21182	10.1
5	+10 VDC	21385	10.0
8	+10 VDC	21300	10.0
15	+15 VDC	22013	15.0
QUIET BUS CURRENT		16294	2237.7
A1-1 NOISY POWER BUS CURRENT		66	0.2
A1-2 NOISY POWER BUS CURRENT		45	0.2

## WARM CAL MODE

## PRT TEMPERATURES

## VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

## FIXED TARGET

## BASEPLATE

## THERMOCOUPLE TEMPERATURES

## FIXED TARGET SHROUD

## VARIABLE TARGET SHROUD

## FIXED TARGET N2

## VARIABLE TARGET N2

## HEATER N2

## FIXED TARGET FLOW METER

## VARIABLE TARGET FLOW METER

## BASEPLATE HEATER N2

## BASEPLATE N2

## BASEPLATE FLOW METER

## ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00

TAR # 004349 Op 8030

**TEST DATA SHEET NO. 11 (Sheet 1 of 5)**  
Science and Engineering Data Test (Cold Cal Mode) (Paragraph 3.3.5.3.3)

Step	Instrument Status	(Y)es / (N)o
1	Cold Cal Mode command received?	Yes
2	ENGR OK message seen?	Yes
3	Both reflectors positioned at cold cal position 1?	Yes
6	Cold Cal Position 2 command received?	Yes
7	ENGR OK message seen?	Yes
8	Both reflectors positioned at cold cal position 2?	Yes
11	Cold Cal Position 3 command received?	Yes
12	ENGR OK message seen?	Yes
13	Both reflectors positioned at cold cal position 3?	Yes
16	Cold Cal Position 4 command received?	Yes
17	ENGR OK message seen?	Yes
18	Both reflectors positioned at cold cal position 4?	Yes

Yes = Pass No = Fail

Step	Element	Description	Measured Value* (Binary)	Required Value (Binary)	(P)ass/(F)ail
4a	1-2	Packet ID		0000100100000011	PASS
4b	3-4	Packet Length		0000001010111111	PASS
4c	5-6	Unit Serial Number		0000001100000000	PASS
4d	7-8	Instrument Mode/ Status		1001101000001000	PASS
9a	7-8	Instrument Mode/ Status		1001101000101000	PASS
14a	7-8	Instrument Mode/ Status		1001101001001000	PASS
19a	7-8	Instrument Mode/ Status		1001101001101000	PASS

RADIOMETER SCENE DATA			
Step	Description	Required Counts	(P)ass/(F)ail
4f	Review All Scene Data	12500-20500	PASS

PRT TEMPERATURE DATA				
Step	Element	Description	Required	(P)ass/(F)ail
4g	1090-1178	Review All PRT Data**	10-40 degrees C	PASS
4g	1180	Temperature Sensor Reference	23244-26317 counts	PASS

\* Rewriting printout data on this data sheet is optional.

\*\* Refer to Table IV for PRT Data Description Op 0580

EOS/AMSU-A1 System P/N 1356008 Shop Order: 560863 S/N: 202  
Circle Test: 1<sup>st</sup> CPT Final CPT Sub CPT \_\_\_\_\_ LPT \_\_\_\_\_

J. S. Sufar 11-24-98  
Customer Representative Date

R. Shum 11/19/98  
Test Systems Engineer (7A) Date  
(300) NOV 19 1998  
Quality Control Date





**TEST DATA SHEET NO. 11** (Sheet 2 of 5)  
Science and Engineering Data Test (Cold Cal Mode) (Paragraph 3.3.5.3.3)

STATUS				
Step	Description	Status*	Required Status	(P)ass/(F)ail
4h	Antenna in Full Scan Mode		NO	PASS
	Antenna in Warm Cal Mode		NO	
	Antenna in Cold Cal Mode		YES	
	Antenna in Nadir Mode		NO	
	Cold Cal Position LSB		ZERO	
	Cold Cal Position MSB		ZERO	
	PLO Redundancy		PLO #1	
	Scanner A1-1 Power		ON	
	Scanner A1-2 Power		ON	
	PLO #1 Lock		YES	
	PLO #2 Lock		OFF	↓
	ADC Latchup Flag		ONE	PASS
9b	Cold Cal Position LSB		ONE	PASS
	Cold Cal Position MSB		ZERO	PASS
14b	Cold Cal Position LSB		ZERO	PASS
	Cold Cal Position MSB		ONE	PASS
19b	Cold Cal Position LSB		ONE	PASS
	Cold Cal Position MSB		ONE	PASS

\* Rewriting printout data on this data sheet is optional.

EOS/AMSU-A1 System P/N 1356008

Circle Test: 1<sup>st</sup> CPT

(Final CPT)

Shop Order: 560863

Sub CPT

Op 0580

S/N: 202

LPT

*J. S. Smith*  
Customer Representative

11/19/98  
Date

*R. S. Smith*  
Test Systems Engineer

11/19/98  
Date

Quality Control

200 NOV 19 1998  
Date

TAR # 004349 Op. # 8030

**TEST DATA SHEET NO. 11** (Sheet 3 of 5)  
Science and Engineering Data Test (Cold Cal Mode) (Paragraph 3.3.5.3.3)

REFLECTOR POSITIONS (Step 6e)						
BP	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
1-30		4129	PASS		3777	PASS
** Required counts from AE26002/1 TDS 5&6 +/- 5 counts for Cold Cal Position #1						

REFLECTOR POSITIONS (Step 14c)						
BP	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
1-30		4053	PASS		3701	PASS
** Required counts from AE26002/1 TDS 5&6 +/- 5 counts for Cold Cal Position #2						

REFLECTOR POSITIONS (Step 22c)						
BP	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
1-30		3977	PASS		3625	PASS
** Required counts from AE26002/1 TDS 5&6 +/- 5 counts for Cold Cal Position #3						

REFLECTOR POSITIONS (Step 30c)						
BP	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
1-30		3826	PASS		3474	PASS
** Required counts from AE26002/1 TDS 5&6 +/- 5 counts for Cold Cal Position #4						

\* Actual range (min to max) of counts from printout (Only beam positions 1-30).  
Rewriting counts on this data sheet is optional.

Op 0580

EOS/AMSU-A1 System P/N 1356008  
Circle Test: 1" CPT Final CPT

Shop Order: 560863  
Sub CPT \_\_\_\_\_

S/N: 202  
LPT

J. S. S. S. 11-24-98  
Customer Representative Date

Ken Shum 11/19/98  
Test Systems Engineer NOV 19 1998  
(Signature)  
Quality Control Date

TAR \* 004349 Op 8030

AE-26156/9A  
19 Aug 98TEST DATA SHEET NO. 11 (Sheet 4 of 5)  
Science and Engineering Data Test (Cold Cal Mode) (Paragraph 3.3.5.3.3)

REFLECTOR POSITIONS (Step 6e)						
Beam Position	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Actual Position (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
Cold Cal 1		4129	PASS		3777	PASS
* Actual count from printout Cold Cal 1 beam position						
** Required counts from AE26002/1 TDS $6 \pm 5$ counts for Cold Cal 1						

REFLECTOR POSITIONS (Step 14c)						
Beam Position	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Actual Position (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
Cold Cal 2		4053	PASS		3701	PASS
* Actual count from printout Cold Cal 2 beam position						
** Required counts from AE26002/1 TDS $6 \pm 5$ counts for Cold Cal 2						

REFLECTOR POSITIONS (Step 22c)						
Beam Position	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Actual Position (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
Cold Cal 3		3977	PASS		3625	PASS
* Actual count from printout Cold Cal 3 beam position						
** Required counts from AE26002/1 TDS $6 \pm 5$ counts for Cold Cal 3						

REFLECTOR POSITIONS (Step 30c)						
Beam Position	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Actual Position (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
Cold Cal 4		3826	PASS		3474	PASS
* Actual count from printout Cold Cal 4 beam position						
** Required counts from AE26002/1 TDS $6 \pm 5$ counts for Cold Cal 4						

Op 0580

EOS/AMSU-A1 System P/N 1356008

Shop Order: 566863

S/N: 202

Circle Test: 1<sup>st</sup> CPT

Final CPT

Sub CPT

LPT

Customer Representative

Date

11-24-98

Test Systems Engineer

Quality Control

Date

Date

NOV 19 1998

TEST DATA SHEET NO. 11 (Sheet 5 of 5)  
Science and Engineering Data Test (Cold Cal Mode) (Paragraph 3.3.5.3.3)

ENGINEERING DATA				
Step	Description	Measured*	Required	(P)ass/(F)ail
4i	Signal Processor (+5 VDC)		+4 to +6 volts	PASS
	Signal Processor (+15 VDC)		+14 to +16 volts	
	Signal Processor (-15 VDC)		-14 to -16 volts	
	Scan Drive (+5 VDC)		+4 to +6 volts	
	Scan Drive (+15 VDC)		+14 to +16 volts	
	Scan Drive (-15 VDC)		-14 to -16 volts	
	PLO (+15 VDC)		+14 to +16 volts	
	PLO (-15 VDC)		-14 to -16 volts	
	Receiver (+8 VDC)		+7 to +9 volts	
	Mixer/IF Amplifier A1-1 (+10 VDC)		+9 to +11 volts	
	Mixer/IF Amplifier A1-2 (+10 VDC)		+9 to +11 volts	
	LO Channel 6		+9 to +11 volts	
	LO Channel 7		+9 to +11 volts	
	LO Channel 3		+9 to +11 volts	
	LO Channel 4		+9 to +11 volts	
	LO Channel 5		+9 to +11 volts	
	LO Channel 8		+9 to +11 volts	
	LO Channel 15		+14 to +16 volts	
	Quiet Bus Current		≤ 3 Amps	
	A1-1 Noisy Bus Current		≤ 125 milliamps	
	A1-2 Noisy Bus Current		≤ 125 milliamps	PASS

\* Rewriting printout data on this data sheet is optional.

Op 0580

EOS/AMSU-A1 System P/N 1356008 Shop Order: 560863 SN: 202  
Circle Test: 1<sup>st</sup> CPT Final CPT Sub CPT \_\_\_\_\_ LPT \_\_\_\_\_

J. Sander 11-24-98  
Customer Representative Date

Ken Sham 11/19/98  
Test Systems Engineer (200) NOV 19 1998  
Quality Control Date

```

EOS A1-03 .EXE;41 COLD CAL MODE P1 19-NOV-98 11:57:49 AN NUMBER 1115
[ 5 ] SCIENCE DATA ELEMENT 0000
[ 6 ] CONTROL/STATUS ELEMENT 00
[ 7 ] ENGINEERING ELEMENT 00

      COMMANDS
[ 9 ] SCANNER A1-1 POWER = ON COLD CAL POSITION 1 = YES [ 16 ]
[ 10 ] SCANNER A1-2 POWER = ON 2 = NO [ 17 ]
[ 11 ] ANTENNA FULL SCAN MODE = NO 3 = NO [ 18 ]
[ 12 ] WARM CAL = NO COLD CAL POSITION 4 = NO [ 19 ]
[ 13 ] COLD CAL = YES RESET C&DH PROCESSOR [ 20 ]
[ 14 ] NADIR = NO GSE MODE [ 21 ]

ENGR OK POWER ON CHECKSUM IN 1E51 CALC 1E51 SA28 1116 SA29 2221
      SCREEN ONLY [ 2 ] PRINT [ 3 ] FULL [ 1 ] RETURN
SELECT BUTTON 3

```

Cold Cal Position 1  
 Data in support of 3.3.5.3.3 Step 3  
 EOS A1 S/N 202 S/0560863 Op 0580  
 TAR00434 Op 8030

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	COLD CAL SAMPLE 17	16633
2		00000011	574	CH 8	16391
3	PACKET LENGTH	00000010	576	CH 9	16391
4		10111111	578	CH 10	16578
5	UNIT SERIAL NUMBER	00000011	580	CH 11	17717
6		00000000	582	CH 12	17902
7	INSTRUMENT MODE/STATUS	10011010	584	CH 13	17588
8		00001000	586	CH 14	19582
10	REFLECTOR 1 POSITION 1	4130	588	CH 15	16524
12	REFLECTOR 2 POSITION 1	3780	590	REFLECTOR 1 POSITION 18	4130
14	REFL 1 POS 1 2ND LOOK	4130	592	REFLECTOR 2 POSITION 18	3780
16	REFL 2 POS 1 2ND LOOK	3780	594	REFL 1 POS 18 2ND LOOK	4130
18	COLD CAL SAMPLE 1	15962	596	REFL 2 POS 18 2ND LOOK	3780
20	CH 3	16438	598	COLD CAL SAMPLE 18	15956
22	CH 4	15655	600	CH 3	16440
24	CH 5	17157	602	CH 4	15653
26	CH 6	15574	604	CH 5	17156
28	CH 7	16632	606	CH 6	15574
30	CH 8	16390	608	CH 7	16630
32	CH 9	16574	610	CH 8	16390
34	CH 10	17712	612	CH 9	16581
36	CH 11	17906	614	CH 10	17707
38	CH 12	17592	616	CH 11	17896
40	CH 13	19590	618	CH 12	17599
42	CH 14	16526	620	CH 13	19592
44	REFLECTOR 1 POSITION 2	4130	622	CH 14	16526
46	REFLECTOR 2 POSITION 2	3780	624	REFLECTOR 1 POSITION 19	4130
48	REFL 1 POS 2 2ND LOOK	4130	626	REFLECTOR 2 POSITION 19	3780
50	REFL 2 POS 2 2ND LOOK	3780	628	REFL 1 POS 19 2ND LOOK	4130
52	COLD CAL SAMPLE 2	15960	630	REFL 2 POS 19 2ND LOOK	3780
54	CH 3	16439	632	COLD CAL SAMPLE 19	15954
56	CH 4	15655	634	CH 3	16441
58	CH 5	17156	636	CH 4	15655
60	CH 6	15573	638	CH 5	17153
62	CH 7	16631	640	CH 6	15578
64	CH 8	16390	642	CH 7	16631
66	CH 9	16575	644	CH 8	16392
68	CH 10	17709	646	CH 9	16581
70	CH 11	17901	648	CH 10	17715
72	CH 12	17587	650	CH 11	17900
74	CH 13	19587	652	CH 12	17583
76	CH 14	16525	654	CH 13	19574
78	REFLECTOR 1 POSITION 3	4130	656	CH 14	16527
80	REFLECTOR 2 POSITION 3	3780	658	CH 15	4130
82	REFL 1 POS 3 2ND LOOK	4130	660	REFLECTOR 1 POSITION 20	3780
84	REFL 2 POS 3 2ND LOOK	3780	662	REFLECTOR 2 POSITION 20	4130
86	COLD CAL SAMPLE 3	15959	664	REFL 1 POS 20 2ND LOOK	3780
88	CH 3	16440	666	REFL 2 POS 20 2ND LOOK	15957
90	CH 4	15655	668	COLD CAL SAMPLE 20	16441
92	CH 5	17158	670	CH 3	15657
	CH 6			CH 4	17159

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15581	672	CH 7	15575
96	CH 8	16634	674	CH 8	16631
98	CH 9	16388	676	CH 9	16393
100	CH 10	16578	678	CH 10	16581
102	CH 11	17707	680	CH 11	17709
104	CH 12	17900	682	CH 12	17892
106	CH 13	17596	684	CH 13	17590
108	CH 14	19583	686	CH 14	19570
110	CH 15	16526	688	CH 15	16527
112	REFLECTOR 1 POSITION 4	4130	690	REFLECTOR 1 POSITION 21	4130
114	REFLECTOR 2 POSITION 4	3780	692	REFLECTOR 2 POSITION 21	3780
116	REFL 1 POS 4 2ND LOOK	4130	694	REFL 1 POS 21 2ND LOOK	4130
118	REFL 2 POS 4 2ND LOOK	3780	696	REFL 2 POS 21 2ND LOOK	3780
120	COLD CAL SAMPLE 4	15957	698	COLD CAL SAMPLE 21	15955
122	CH 3	16441	700	CH 3	16441
124	CH 4	15653	702	CH 4	15656
126	CH 5	17161	704	CH 5	17154
128	CH 6	15575	706	CH 6	15575
130	CH 7	16628	708	CH 7	16633
132	CH 8	16391	710	CH 8	16395
134	CH 9	16576	712	CH 9	16578
136	CH 10	17715	714	CH 10	17711
138	CH 11	17903	716	CH 11	17893
140	CH 12	17599	718	CH 12	17581
142	CH 13	19586	720	CH 13	19575
144	CH 14	16528	722	CH 14	16526
146	CH 15	4130	724	CH 15	4130
148	REFLECTOR 1 POSITION 5	3780	726	REFLECTOR 1 POSITION 22	3780
150	REFLECTOR 2 POSITION 5	4130	728	REFLECTOR 2 POSITION 22	4130
152	REFL 1 POS 5 2ND LOOK	3780	730	REFL 1 POS 22 2ND LOOK	3780
154	REFL 2 POS 5 2ND LOOK	15963	732	REFL 2 POS 22 2ND LOOK	15951
156	COLD CAL SAMPLE 5	16441	734	COLD CAL SAMPLE 22	16437
158	CH 3	15655	736	CH 3	15656
160	CH 4	17157	738	CH 4	17157
162	CH 5	15581	740	CH 5	15578
164	CH 6	16631	742	CH 6	16631
166	CH 7	16391	744	CH 7	16387
168	CH 8	16572	746	CH 8	16581
170	CH 9	17709	748	CH 9	17721
172	CH 10	17905	750	CH 10	17896
174	CH 11	17583	752	CH 11	17586
176	CH 12	19567	754	CH 12	19605
178	CH 13	16527	756	CH 13	16528
180	CH 14	4130	758	CH 14	4130
182	CH 15	3780	760	CH 15	3780
184	REFLECTOR 1 POSITION 6	4130	762	REFLECTOR 1 POSITION 23	4130
186	REFLECTOR 2 POSITION 6	3780	764	REFLECTOR 2 POSITION 23	3780
188	REFL 1 POS 6 2ND LOOK	15955	766	REFL 1 POS 23 2ND LOOK	15959
190	REFL 2 POS 6 2ND LOOK	16443	768	REFL 2 POS 23 2ND LOOK	16440
192	COLD CAL SAMPLE 6	15656	770	COLD CAL SAMPLE 23	15656

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17155	772	CH 6	17156
196	CH 7	15575	774	CH 7	15578
198	CH 8	16631	776	CH 8	16633
200	CH 9	16389	778	CH 9	16394
202	CH 10	16576	780	CH 10	16576
204	CH 11	17715	782	CH 11	17715
206	CH 12	17899	784	CH 12	17906
208	CH 13	17593	786	CH 13	17581
210	CH 14	19591	788	CH 14	19591
212	CH 15	16526	790	CH 15	16526
214	REFLECTOR 1 POSITION 7	4130	792	REFLECTOR 1 POSITION 24	4130
216	REFLECTOR 2 POSITION 7	3780	794	REFLECTOR 2 POSITION 24	3780
218	REFL 1 POS 7 2ND LOOK	4130	796	REFL 1 POS 24 2ND LOOK	4130
220	REFL 2 POS 7 2ND LOOK	3780	798	REFL 2 POS 24 2ND LOOK	3780
222	COLD CAL SAMPLE 7	15960	800	COLD CAL SAMPLE 24	15958
224	CH 4	16443	802	CH 3	16444
226	CH 5	15655	804	CH 4	15658
228	CH 6	17160	806	CH 5	17155
230	CH 7	15578	808	CH 6	15574
232	CH 8	16632	810	CH 7	16633
234	CH 9	16392	812	CH 8	16391
236	CH 10	16580	814	CH 9	16576
238	CH 11	17718	816	CH 10	17714
240	CH 12	17896	818	CH 11	17897
242	CH 13	17587	820	CH 12	17586
244	CH 14	19593	822	CH 13	19601
246	CH 15	16524	824	CH 14	16525
248	REFLECTOR 1 POSITION 8	4130	826	REFLECTOR 1 POSITION 25	4130
250	REFLECTOR 2 POSITION 8	3780	828	REFLECTOR 2 POSITION 25	3780
252	REFL 1 POS 8 2ND LOOK	4130	830	REFL 1 POS 25 2ND LOOK	4130
254	REFL 2 POS 8 2ND LOOK	3780	832	REFL 2 POS 25 2ND LOOK	3780
256	COLD CAL SAMPLE 8	15959	834	COLD CAL SAMPLE 25	15963
258	CH 3	16440	836	CH 3	16441
260	CH 4	15658	838	CH 4	15658
262	CH 5	17157	840	CH 5	17151
264	CH 6	15577	842	CH 6	15576
266	CH 7	16632	844	CH 7	16631
268	CH 8	16391	846	CH 8	16386
270	CH 9	16578	848	CH 9	16575
272	CH 10	17710	850	CH 10	17714
274	CH 11	17900	852	CH 11	17905
276	CH 12	17582	854	CH 12	17594
278	CH 13	19595	856	CH 13	19597
280	CH 14	16526	858	CH 14	16523
282	CH 15	4130	860	CH 15	4130
284	REFLECTOR 1 POSITION 9	3780	862	REFLECTOR 1 POSITION 26	3780
286	REFLECTOR 2 POSITION 9	4130	864	REFLECTOR 2 POSITION 26	4130
288	REFL 1 POS 9 2ND LOOK	3780	866	REFL 1 POS 26 2ND LOOK	3780
290	REFL 2 POS 9 2ND LOOK	15953	868	REFL 2 POS 26 2ND LOOK	15956
292	COLD CAL SAMPLE 9	16444	870	COLD CAL SAMPLE 26	16439
	CH 3			CH 3	
	CH 4			CH 4	



ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15655	872	CH 5	15657
296	CH 6	17158	874	CH 6	17156
298	CH 7	15579	876	CH 7	15577
300	CH 8	16632	878	CH 8	16632
302	CH 9	16392	880	CH 9	16388
304	CH 10	16575	882	CH 10	16572
306	CH 11	17713	884	CH 11	17714
308	CH 12	17905	886	CH 12	17901
310	CH 13	17588	888	CH 13	17596
312	CH 14	19611	890	CH 14	19603
314	CH 15	16524	892	CH 15	16525
316	REFLECTOR 1 POSITION 10	4130	894	REFLECTOR 1 POSITION 27	4130
318	REFLECTOR 2 POSITION 10	3780	896	REFLECTOR 2 POSITION 27	3780
320	REFL 1 POS 10 2ND LOOK	4130	898	REFL 1 POS 27 2ND LOOK	4130
322	REFL 2 POS 10 2ND LOOK	3780	900	REFL 2 POS 27 2ND LOOK	3780
324	COLD CAL SAMPLE 10	15956	902	COLD CAL SAMPLE 27	15961
326	CH 4	16443	904	CH 4	16443
328	CH 5	15652	906	CH 5	15655
330	CH 6	17155	908	CH 6	17154
332	CH 7	15579	910	CH 7	15577
334	CH 8	16632	912	CH 8	16635
336	CH 9	16390	914	CH 9	16388
338	CH 10	16580	916	CH 10	16577
340	CH 11	17706	918	CH 11	17711
342	CH 12	17895	920	CH 12	17904
344	CH 13	17579	922	CH 13	17581
346	CH 14	19598	924	CH 14	19588
348	CH 15	16527	926	CH 15	16526
350	REFLECTOR 1 POSITION 11	4130	928	REFLECTOR 1 POSITION 28	4130
352	REFLECTOR 2 POSITION 11	3780	930	REFLECTOR 2 POSITION 28	3780
354	REFL 1 POS 11 2ND LOOK	4130	932	REFL 1 POS 28 2ND LOOK	4130
356	REFL 2 POS 11 2ND LOOK	3780	934	REFL 2 POS 28 2ND LOOK	3780
358	COLD CAL SAMPLE 11	15963	936	COLD CAL SAMPLE 28	15955
360	CH 4	16440	938	CH 4	16441
362	CH 5	15656	940	CH 5	15653
364	CH 6	17154	942	CH 6	17152
366	CH 7	15579	944	CH 7	15576
368	CH 8	16631	946	CH 8	16631
370	CH 9	16392	948	CH 9	16390
372	CH 10	16577	950	CH 10	16575
374	CH 11	17712	952	CH 11	17718
376	CH 12	17903	954	CH 12	17896
378	CH 13	17599	956	CH 13	17592
380	CH 14	19605	958	CH 14	19606
382	CH 15	16526	960	CH 15	16529
384	REFLECTOR 1 POSITION 12	4130	962	REFLECTOR 1 POSITION 29	4130
386	REFLECTOR 2 POSITION 12	3780	964	REFLECTOR 2 POSITION 29	3780
388	REFL 1 POS 12 2ND LOOK	4130	966	REFL 1 POS 29 2ND LOOK	4130
390	REFL 2 POS 12 2ND LOOK	3780	968	REFL 2 POS 29 2ND LOOK	3780
392	COLD CAL SAMPLE 12	15953	970	COLD CAL SAMPLE 29	15954

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16438	972	CH 4	16441
396	CH 5	15655	974	CH 5	15655
398	CH 6	17158	976	CH 6	17153
400	CH 7	15575	978	CH 7	15576
402	CH 8	16629	980	CH 8	16631
404	CH 9	16388	982	CH 9	16392
406	CH 10	16579	984	CH 10	16577
408	CH 11	17716	986	CH 11	17711
410	CH 12	17895	988	CH 12	17896
412	CH 13	17611	990	CH 13	17591
414	CH 14	19597	992	CH 14	19605
416	CH 15	16526	994	CH 15	16525
418	REFLECTOR 1 POSITION 13	4130	996	REFLECTOR 1 POSITION 30	4130
420	REFLECTOR 2 POSITION 13	3780	998	REFLECTOR 2 POSITION 30	3780
422	REFL 1 POS 13 2ND LOOK	4130	1000	REFL 1 POS 30 2ND LOOK	4130
424	REFL 2 POS 13 2ND LOOK	3780	1002	REFL 2 POS 30 2ND LOOK	3780
426	COLD CAL SAMPLE 13	15957	1004	COLD CAL SAMPLE 30	15963
428	CH 3	16438	1006	CH 3	16442
430	CH 4	15659	1008	CH 4	15658
432	CH 5	17157	1010	CH 5	17154
434	CH 6	15574	1012	CH 6	15580
436	CH 7	16633	1014	CH 7	16634
438	CH 8	16388	1016	CH 8	16389
440	CH 9	16574	1018	CH 9	16576
442	CH 10	17711	1020	CH 10	17712
444	CH 11	17901	1022	CH 11	17900
446	CH 12	17592	1024	CH 12	17585
448	CH 13	19575	1026	CH 13	19581
450	CH 14	16526	1028	CH 14	16526
452	CH 15	4130	1030	CH 15	OE
454	REFLECTOR 1 POSITION 14	3780	1032	REFLECTOR 1 COLD CAL POS	OE
456	REFLECTOR 2 POSITION 14	4130	1034	REFLECTOR 2 COLD CAL POS	OE
458	REFL 1 POS 14 2ND LOOK	3780	1036	REFL 1 COLD CAL 2ND LOOK	OE
460	REFL 2 POS 14 2ND LOOK	15952	1038	REFL 2 COLD CAL 2ND LOOK	OE
462	COLD CAL SAMPLE 14	16440	1040	COLD CAL DATA 1	0
464	CH 3	16440	1042	CH 3	0
466	CH 4	15657	1044	CH 4	0
468	CH 5	17157	1046	CH 5	0
470	CH 6	15578	1048	CH 6	0
472	CH 7	16632	1050	CH 7	0
474	CH 8	16391	1052	CH 8	0
476	CH 9	16581	1054	CH 9	0
478	CH 10	17713	1056	CH 10	0
480	CH 11	17904	1058	CH 11	0
482	CH 12	17604	1060	CH 12	0
484	CH 13	19583	1062	CH 13	0
486	CH 14	16525	1064	CH 14	0
488	CH 15	4130	1066	CH 15	0
490	REFLECTOR 1 POSITION 15	3780	1068	REFLECTOR 1 COLD CAL DATA 2	0
492	REFLECTOR 2 POSITION 15	4130	1070	REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK	3780		REFL 1 COLD CAL 2ND LOOK	0
	REFL 2 POS 15 2ND LOOK	3780		REFL 2 COLD CAL 2ND LOOK	0

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	COLD CAL SAMPLE 15	CH 3	15954	1072	CH 7
496		CH 4	16437	1074	CH 8
498		CH 5	15656	1076	CH 9
500		CH 6	17156	1078	CH 10
502		CH 7	15576	1080	CH 11
504		CH 8	16632	1082	CH 12
506		CH 9	16397	1084	CH 13
508		CH 10	16579	1086	CH 14
510		CH 11	17712	1088	CH 15
512		CH 12	17903	1182	REFLECTOR 1 WARM CAL POS
514		CH 13	17599	1184	REFLECTOR 2 WARM CAL POS
516		CH 14	19576	1186	REFL 1 WARM CAL 2ND LOOK
518		CH 15	16526	1188	REFL 2 WARM CAL 2ND LOOK
520	REFLECTOR 1 POSITION 16	CH 16	4130	1190	WARM CAL DATA 1
522	REFLECTOR 2 POSITION 16	CH 17	3780	1192	CH 3
524	REFL 1 POS 16 2ND LOOK	CH 18	4130	1194	CH 4
526	REFL 2 POS 16 2ND LOOK	CH 19	3780	1196	CH 5
528	COLD CAL SAMPLE 16	CH 20	15959	1198	CH 6
530		CH 21	16441	1200	CH 7
532		CH 22	15658	1202	CH 8
534		CH 23	17157	1204	CH 9
536		CH 24	15577	1206	CH 10
538		CH 25	16632	1208	CH 11
540		CH 26	16393	1210	CH 12
542		CH 27	16579	1212	CH 13
544		CH 28	17712	1214	CH 14
546		CH 29	17898	1216	CH 15
548		CH 30	17575	1218	CH 3
550		CH 31	19575	1220	CH 4
552		CH 32	16528	1222	CH 5
554	REFLECTOR 1 POSITION 17	CH 33	4130	1224	CH 6
556	REFLECTOR 2 POSITION 17	CH 34	3780	1226	CH 7
558	REFL 1 POS 17 2ND LOOK	CH 35	4130	1228	CH 8
560	REFL 2 POS 17 2ND LOOK	CH 36	3780	1230	CH 9
562	COLD CAL SAMPLE 17	CH 37	15954	1232	CH 10
564		CH 38	16442	1234	CH 11
566		CH 39	15657	1236	CH 12
568		CH 40	17154	1238	CH 13
570		CH 41	15580	1240	CH 14

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE	DEG C
1090	SCAN MOTOR A1-1	17851	22.65	
1092	SCAN MOTOR A1-2	19189	24.49	
1094	FEED HORN A1-1	20019	27.11	
1096	FEED HORN A1-2	21277	29.56	
1098	RF MUX A1-1	22095	30.94	
1100	RF MUX A1-2	23508	33.79	
1102	LOCAL OSCILLATOR CHANNEL 3	24414	35.77	
1104	LOCAL OSCILLATOR CHANNEL 4	24826	35.89	
1106	LOCAL OSCILLATOR CHANNEL 5	23699	34.34	
1108	LOCAL OSCILLATOR CHANNEL 6	22387	30.88	
1110	LOCAL OSCILLATOR CHANNEL 7	22812	32.42	
1112	LOCAL OSCILLATOR CHANNEL 8	24217	35.15	
1114	LOCAL OSCILLATOR CHANNEL 15	23899	34.13	
1116	PLLO #2	22100	30.98	
1118	PLLO #1	25050	36.73	
1120	1553 INTERFACE	18034	36.12	
1122	MIXER/IF AMPLIFIER CHANNEL 3	23809	34.37	
1124	MIXER/IF AMPLIFIER CHANNEL 4	23971	34.13	
1126	MIXER/IF AMPLIFIER CHANNEL 5	23591	33.81	
1128	MIXER/IF AMPLIFIER CHANNEL 6	22393	31.51	
1130	MIXER/IF AMPLIFIER CHANNEL 7	22408	32.10	
1132	MIXER/IF AMPLIFIER CHANNEL 8	23890	34.34	
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	21859	30.71	
1136	MIXER/IF AMPLIFIER CHANNEL 15	23644	34.16	
1138	IF AMPLIFIER CHANNEL 11 THRU 14	23415	33.45	
1140	IF AMPLIFIER CHANNEL 9	23593	33.63	
1142	IF AMPLIFIER CHANNEL 10	23447	33.75	
1144	IF AMPLIFIER CHANNEL 11	22549	31.15	
1146	DC/DC CONVERTER	25160	36.23	
1148	IF AMPLIFIER CHANNEL 13	22133	30.47	
1150	IF AMPLIFIER CHANNEL 14	22491	31.61	
1152	IF AMPLIFIER CHANNEL 12	22297	31.02	
1154	RF SHELF A1-1	22863	32.41	
1156	RF SHELF A1-2	23597	33.20	
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	20508	27.91	
1160	A1-1 WARM LOAD 1	23293	23.60	
1162	A1-1 WARM LOAD 2	23788	23.71	
1164	A1-1 WARM LOAD 3	23283	23.73	
1166	A1-1 WARM LOAD 4	23362	23.70	
1168	A1-1 WARM LOAD CENTER	23561	23.71	
1170	A1-2 WARM LOAD 1	24653	25.74	
1172	A1-2 WARM LOAD 2	24707	25.75	
1174	A1-2 WARM LOAD 3	24723	25.76	
1176	A1-2 WARM LOAD 4	24715	25.64	
1178	A1-2 WARM LOAD CENTER	24716	25.74	
1180	TEMP SENSOR REFERENCE VOLTAGE	25269		

DESCRIPTION      STATUS

ANTENNA IN FULL SCAN MODE      NO  
 ANTENNA IN WARM CAL MODE      NO  
 ANTENNA IN COLD CAL MODE      YES  
 ANTENNA IN NADIR MODE      NO  
 COLD CAL. POSITION LSB      ZERO  
 COLD CAL. POSITION MSB      ZERO  
 PLO REDUNDANCY      PLO # 1  
     ON  
 SCANNER A1-1 POWER      ON  
 SCANNER A1-2 POWER      ON  
 PLO #1 LOCK      YES  
 PLO #2 LOCK      OFF  
 ADC LATCHUP FLAG      ONE

ENGINEERING DATA

DESCRIPTION      VALUE      MA/VOLTS      DEG C

A1-1 SCANNER MOTOR TEMPERATURE      22135      4.9      22.3  
 A1-1 RF SHELF TEMPERATURE #1      21833      15.1      29.3  
 A1-1 WARM LOAD TEMPERATURE      21792      -15.0      23.0  
 A1-2 SCANNER MOTOR TEMPERATURE      22159      4.9      24.9  
 A1-2 RF SHELF TEMPERATURE #1      22181      14.9      33.7  
 A1-2 WARM LOAD TEMPERATURE      21843      -15.1      25.3  
 A1-1 RF SHELF TEMPERATURE #2      22552      14.8      29.1  
 A1-2 RF SHELF TEMPERATURE #2      22080      -15.2      33.3

SIGNAL PROCESSOR      +5 VDC      22135      4.9  
     +15 VDC      21833      15.1  
     -15 VDC      21792      -15.0  
 SCAN DRIVE      +5 VDC      22159      4.9  
     +15 VDC      22181      14.9  
     -15 VDC      21843      -15.1  
 PLO      +15 VDC      22552      14.8  
     -15 VDC      22080      -15.2  
 RECEIVER      +8 VDC      21814      7.9  
 MIXER/IF AMPLIFIER A1-1      +10 VDC      21417      10.0  
     A1-2      +10 VDC      21430      10.0  
 LO CHANNEL 6      +10 VDC      21393      10.0  
     7      +10 VDC      21448      10.0  
 SPARE      32767      327.7  
 LO CHANNEL 3      21249      10.1  
     4      +10 VDC      21182      10.1  
     5      +10 VDC      21381      10.0  
     8      +10 VDC      21311      10.0  
     15      +15 VDC      22015      15.0  
 QUIET BUS CURRENT      16371      2248.5  
 A1-1 NOISY POWER BUS CURRENT      58      0.2  
 A1-2 NOISY POWER BUS CURRENT      36      0.2

## PRT TEMPERATURES

## VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

## FIXED TARGET

## BASEPLATE

## THERMOCOUPLE TEMPERATURES

## FIXED TARGET SHROUD

## VARIABLE TARGET SHROUD

## FIXED TARGET N2

## VARIABLE TARGET N2

## HEATER N2

## FIXED TARGET FLOW METER

## VARIABLE TARGET FLOW METER

## BASEPLATE HEATER N2

## BASEPLATE N2

## BASEPLATE FLOW METER

## ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00

```

EOS A1-03 .EXE;41 COLD CAL MODE AN NUMBER 1165
[ 5 ] SCIENCE DATA ELEMENT 0000
[ 6 ] CONTROL/STATUS ELEMENT 00
[ 7 ] ENGINEERING ELEMENT 00

      COMMANDS
[ 9 ] SCANNER A1-1 POWER = ON          PLO POWER = PLO#1 [ 15 ]
[10 ] SCANNER A1-2 POWER = ON          COLD CAL POSITION 1 = YES [ 16 ]
[11 ] ANTENNA FULL SCAN MODE = NO      2 = NO [ 17 ]
[12 ] WARM CAL = NO                   3 = NO [ 18 ]
[13 ] COLD CAL = YES                  COLD CAL POSITION 4 = NO [ 19 ]
[14 ] NADIR = NO                      RESET C&DH PROCESSOR [ 20 ]
                                     GSE MODE [ 21 ]
ENGR OK POWER ON CHECKSUM IN BB5 CALC BB5 SA28 1165 SA29 2319
                                     SCREEN ONLY [ 2 ] PRINT [ 3 ] FULL [ 1 ] RETURN
SELECT BUTTON 3

```

Cold Cal Position 1  
 Data in support of para 33.53.3 Step 6  
 EOS A1 S/N 202, S/O 560863 Op 0580  
 TAR 00434 Op 8030

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	COLD CAL SAMPLE 17	16633
2		00000011	574	CH 8	16390
3	PACKET LENGTH	00000010	576	CH 9	16576
4		10111111	578	CH 10	17701
5	UNIT SERIAL NUMBER	00000011	580	CH 11	17883
6		00000000	582	CH 12	17573
7	INSTRUMENT MODE/STATUS	10011010	584	CH 13	19561
8		00001000	586	CH 14	16520
10	REFLECTOR 1 POSITION 1	4125	588	CH 15	4125
12	REFLECTOR 2 POSITION 1	3772	590	REFLECTOR 1 POSITION 18	3772
14	REFL 1 POS 1 2ND LOOK	4125	592	REFLECTOR 2 POSITION 18	3772
16	REFL 2 POS 1 2ND LOOK	3772	594	REFL 1 POS 18 2ND LOOK	4125
18	COLD CAL SAMPLE 1	15949	596	REFL 2 POS 18 2ND LOOK	3772
20	CH 3	16433	598	COLD CAL SAMPLE 18	15958
22	CH 4	15652	600	CH 3	16434
24	CH 5	17154	602	CH 4	15653
26	CH 6	15573	604	CH 5	17152
28	CH 7	16633	606	CH 6	15573
30	CH 8	16385	608	CH 7	15573
32	CH 9	16569	610	CH 8	16386
34	CH 10	17696	612	CH 9	16567
36	CH 11	17885	614	CH 10	17697
38	CH 12	17561	616	CH 11	17872
40	CH 13	19559	618	CH 12	17562
42	CH 14	16519	620	CH 13	19540
44	CH 15	4125	622	CH 14	16521
46	REFLECTOR 1 POSITION 2	3772	624	CH 15	4125
48	REFL 1 POS 2 2ND LOOK	4125	626	REFLECTOR 1 POSITION 19	3772
50	REFL 2 POS 2 2ND LOOK	3772	628	REFLECTOR 2 POSITION 19	4125
52	COLD CAL SAMPLE 2	15953	630	REFL 1 POS 19 2ND LOOK	3772
54	CH 3	16436	632	REFL 2 POS 19 2ND LOOK	15951
56	CH 4	15648	634	COLD CAL SAMPLE 19	16431
58	CH 5	17150	636	CH 3	15652
60	CH 6	15569	638	CH 4	17150
62	CH 7	16629	640	CH 5	15573
64	CH 8	16389	642	CH 6	16632
66	CH 9	16572	644	CH 7	16386
68	CH 10	17695	646	CH 8	16571
70	CH 11	17892	648	CH 9	17691
72	CH 12	17570	650	CH 10	17892
74	CH 13	19580	652	CH 11	17562
76	CH 14	16520	654	CH 12	19560
78	CH 15	4125	656	CH 13	16522
80	REFLECTOR 1 POSITION 3	4125	658	CH 14	4125
82	REFLECTOR 2 POSITION 3	3772	660	CH 15	3772
84	REFL 1 POS 3 2ND LOOK	4125	662	REFLECTOR 1 POSITION 20	3772
86	REFL 2 POS 3 2ND LOOK	3772	664	REFLECTOR 2 POSITION 20	4125
88	COLD CAL SAMPLE 3	15957	666	REFL 1 POS 20 2ND LOOK	4125
90	CH 3	16434	668	REFL 2 POS 20 2ND LOOK	3772
92	CH 4	15650	670	COLD CAL SAMPLE 20	15955
	CH 5	17151		CH 3	16432
	CH 6	17151		CH 4	15647
				CH 5	17153



ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15571	672	CH 7	15572
96	CH 8	16630	674	CH 8	16635
98	CH 9	16387	676	CH 9	16386
100	CH 10	16565	678	CH 10	16571
102	CH 11	17700	680	CH 11	17696
104	CH 12	17884	682	CH 12	17880
106	CH 13	17575	684	CH 13	17568
108	CH 14	19587	686	CH 14	19585
110	CH 15	16521	688	CH 15	16521
112	REFLECTOR 1 POSITION 4	4125	690	REFLECTOR 1 POSITION 21	4125
114	REFLECTOR 2 POSITION 4	3772	692	REFLECTOR 2 POSITION 21	3772
116	REFL 1 POS 4 2ND LOOK	4125	694	REFL 1 POS 21 2ND LOOK	4125
118	REFL 2 POS 4 2ND LOOK	3772	696	REFL 2 POS 21 2ND LOOK	3772
120	COLD CAL SAMPLE 4	15961	698	COLD CAL SAMPLE 21	15954
122	CH 3	16436	700	CH 3	16432
124	CH 4	15651	702	CH 4	15647
126	CH 5	17151	704	CH 5	17149
128	CH 6	15570	706	CH 6	15571
130	CH 7	16631	708	CH 7	15571
132	CH 8	16388	710	CH 8	16633
134	CH 9	16567	712	CH 9	16385
136	CH 10	17696	714	CH 10	16567
138	CH 11	17882	716	CH 11	17694
140	CH 12	17560	718	CH 12	17879
142	CH 13	19557	720	CH 13	17565
144	CH 14	16522	722	CH 14	19585
146	CH 15	4125	724	CH 15	16522
148	REFLECTOR 1 POSITION 5	3772	726	REFLECTOR 1 POSITION 22	4125
150	REFLECTOR 2 POSITION 5	4125	728	REFLECTOR 2 POSITION 22	3772
152	REFL 1 POS 5 2ND LOOK	4125	730	REFL 1 POS 22 2ND LOOK	4125
154	REFL 2 POS 5 2ND LOOK	3772	732	REFL 2 POS 22 2ND LOOK	3772
156	COLD CAL SAMPLE 5	15956	734	COLD CAL SAMPLE 22	15958
158	CH 3	16431	736	CH 3	16433
160	CH 4	15652	738	CH 4	15644
162	CH 5	17154	740	CH 5	17151
164	CH 6	15570	742	CH 6	15572
166	CH 7	16629	744	CH 7	16628
168	CH 8	16388	746	CH 8	16387
170	CH 9	16572	748	CH 9	16571
172	CH 10	17698	750	CH 10	17699
174	CH 11	17895	752	CH 11	17872
176	CH 12	17560	754	CH 12	17573
178	CH 13	19559	756	CH 13	19554
180	CH 14	16520	758	CH 14	16521
182	CH 15	4125	760	CH 15	4125
184	REFLECTOR 1 POSITION 6	3772	762	REFLECTOR 1 POSITION 23	3772
186	REFLECTOR 2 POSITION 6	4125	764	REFLECTOR 2 POSITION 23	3772
188	REFL 1 POS 6 2ND LOOK	4125	766	REFL 1 POS 23 2ND LOOK	4125
190	REFL 2 POS 6 2ND LOOK	3772	768	REFL 2 POS 23 2ND LOOK	3772
192	COLD CAL SAMPLE 6	15960	770	COLD CAL SAMPLE 23	15954
	CH 3	16436		CH 3	16435
	CH 4	15651		CH 4	15643
	CH 5			CH 5	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17153	772	CH 6	17155
196	CH 7	15570	774	CH 7	15572
198	CH 8	16631	776	CH 8	16633
200	CH 9	16385	778	CH 9	16385
202	CH 10	16569	780	CH 10	16573
204	CH 11	17706	782	CH 11	17699
206	CH 12	17878	784	CH 12	17876
208	CH 13	17573	786	CH 13	17566
210	CH 14	19538	788	CH 14	19567
212	CH 15	16521	790	CH 15	16522
214	REFLECTOR 1 POSITION 7	4125	792	REFLECTOR 1 POSITION 24	4125
216	REFLECTOR 2 POSITION 7	3772	794	REFLECTOR 2 POSITION 24	3772
218	REFL 1 POS 7 2ND LOOK	4125	796	REFL 1 POS 24 2ND LOOK	4125
220	REFL 2 POS 7 2ND LOOK	3772	798	REFL 2 POS 24 2ND LOOK	3772
222	COLD CAL SAMPLE 7 CH 3	15957	800	COLD CAL SAMPLE 24 CH 3	15953
224	CH 4	16433	802	CH 4	16432
226	CH 5	15651	804	CH 5	15650
228	CH 6	17151	806	CH 6	17155
230	CH 7	15572	808	CH 7	15571
232	CH 8	16632	810	CH 8	16634
234	CH 9	16385	812	CH 9	16390
236	CH 10	16570	814	CH 10	16568
238	CH 11	17699	816	CH 11	17696
240	CH 12	17887	818	CH 12	17883
242	CH 13	17571	820	CH 13	17572
244	CH 14	19561	822	CH 14	19559
246	CH 15	16522	824	CH 15	16522
248	REFLECTOR 1 POSITION 8	4125	826	REFLECTOR 1 POSITION 25	4125
250	REFLECTOR 2 POSITION 8	3772	828	REFLECTOR 2 POSITION 25	3772
252	REFL 1 POS 8 2ND LOOK	4125	830	REFL 1 POS 25 2ND LOOK	4125
254	REFL 2 POS 8 2ND LOOK	3772	832	REFL 2 POS 25 2ND LOOK	3772
256	COLD CAL SAMPLE 8 CH 3	15955	834	COLD CAL SAMPLE 25 CH 3	15953
258	CH 4	16434	836	CH 4	16436
260	CH 5	15651	838	CH 5	15650
262	CH 6	17151	840	CH 6	17150
264	CH 7	15569	842	CH 7	15573
266	CH 8	16627	844	CH 8	16632
268	CH 9	16385	846	CH 9	16384
270	CH 10	16573	848	CH 10	16571
272	CH 11	17706	850	CH 11	17693
274	CH 12	17879	852	CH 12	17885
276	CH 13	17563	854	CH 13	17569
278	CH 14	19575	856	CH 14	19571
280	CH 15	16520	858	CH 15	16522
282	REFLECTOR 1 POSITION 9	4125	860	REFLECTOR 1 POSITION 26	4125
284	REFLECTOR 2 POSITION 9	3772	862	REFLECTOR 2 POSITION 26	3772
286	REFL 1 POS 9 2ND LOOK	4125	864	REFL 1 POS 26 2ND LOOK	4125
288	REFL 2 POS 9 2ND LOOK	3772	866	REFL 2 POS 26 2ND LOOK	3772
290	COLD CAL SAMPLE 9 CH 3	15956	868	COLD CAL SAMPLE 26 CH 3	15954
292	CH 4	16433	870	CH 4	16433

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15649	872	CH 5	15650
296	CH 6	17154	874	CH 6	17153
298	CH 7	15571	876	CH 7	15571
300	CH 8	16633	878	CH 8	16630
302	CH 9	16389	880	CH 9	16384
304	CH 10	16572	882	CH 10	16570
306	CH 11	17691	884	CH 11	17695
308	CH 12	17879	886	CH 12	17889
310	CH 13	17553	888	CH 13	17551
312	CH 14	19562	890	CH 14	19562
314	CH 15	16519	892	CH 15	16522
316	REFLECTOR 1 POSITION 10	4125	894	REFLECTOR 1 POSITION 27	4125
318	REFLECTOR 2 POSITION 10	3772	896	REFLECTOR 2 POSITION 27	3772
320	REFL 1 POS 10 2ND LOOK	4125	898	REFL 1 POS 27 2ND LOOK	4125
322	REFL 2 POS 10 2ND LOOK	3772	900	REFL 2 POS 27 2ND LOOK	3772
324	COLD CAL SAMPLE 10	15958	902	COLD CAL SAMPLE 27	15955
326	CH 3	16433	904	CH 3	16433
328	CH 4	15646	906	CH 4	15647
330	CH 5	17152	908	CH 5	17154
332	CH 6	15573	910	CH 6	15572
334	CH 7	16633	912	CH 7	16633
336	CH 8	16391	914	CH 8	16385
338	CH 9	16573	916	CH 9	16571
340	CH 10	17696	918	CH 10	17697
342	CH 11	17882	920	CH 11	17881
344	CH 12	17571	922	CH 12	17562
346	CH 13	19573	924	CH 13	19554
348	CH 14	16523	926	CH 14	16523
350	CH 15	4125	928	CH 15	4125
352	REFLECTOR 1 POSITION 11	3772	930	REFLECTOR 1 POSITION 28	3772
354	REFLECTOR 2 POSITION 11	4125	932	REFLECTOR 2 POSITION 28	4125
356	REFL 1 POS 11 2ND LOOK	4125	934	REFL 1 POS 28 2ND LOOK	3772
358	REFL 2 POS 11 2ND LOOK	3772	936	REFL 2 POS 28 2ND LOOK	15950
360	COLD CAL SAMPLE 11	15956	938	COLD CAL SAMPLE 28	16434
362	CH 3	16433	940	CH 3	15648
364	CH 4	15649	942	CH 4	17155
366	CH 5	17156	944	CH 5	15571
368	CH 6	15573	946	CH 6	16631
370	CH 7	16632	948	CH 7	16388
372	CH 8	16387	950	CH 8	16571
374	CH 9	16574	952	CH 9	16388
376	CH 10	17702	954	CH 10	17698
378	CH 11	17893	956	CH 11	17889
380	CH 12	17574	958	CH 12	17570
382	CH 13	19577	960	CH 13	19580
384	CH 14	16522	962	CH 14	16522
386	CH 15	4125	964	CH 15	4125
388	REFLECTOR 1 POSITION 12	3772	966	REFLECTOR 1 POSITION 29	3772
390	REFLECTOR 2 POSITION 12	4125	968	REFLECTOR 2 POSITION 29	3772
392	REFL 1 POS 12 2ND LOOK	3772	970	REFL 1 POS 29 2ND LOOK	15954
	REFL 2 POS 12 2ND LOOK	15956		REFL 2 POS 29 2ND LOOK	
	COLD CAL SAMPLE 12			COLD CAL SAMPLE 29	
	CH 3			CH 3	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16434	972	CH 4	16432
396	CH 5	15648	974	CH 5	15649
398	CH 6	17152	976	CH 6	17154
400	CH 7	15571	978	CH 7	15573
402	CH 8	16635	980	CH 8	16628
404	CH 9	16388	982	CH 9	16386
406	CH 10	16571	984	CH 10	16568
408	CH 11	17697	986	CH 11	17697
410	CH 12	17890	988	CH 12	17879
412	CH 13	17570	990	CH 13	17566
414	CH 14	19588	992	CH 14	19544
416	CH 15	16520	994	CH 15	16521
418	REFLECTOR 1 POSITION 13	4125	996	REFLECTOR 1 POSITION 30	4125
420	REFLECTOR 2 POSITION 13	3772	998	REFLECTOR 2 POSITION 30	3772
422	REFL 1 POS 13 2ND LOOK	4125	1000	REFL 1 POS 30 2ND LOOK	4125
424	REFL 2 POS 13 2ND LOOK	3772	1002	REFL 2 POS 30 2ND LOOK	3772
426	COLD CAL SAMPLE 13	15959	1004	COLD CAL SAMPLE 30	15952
428	CH 3	16433	1006	CH 3	16432
430	CH 4	15650	1008	CH 4	15650
432	CH 5	17154	1010	CH 5	17154
434	CH 6	15570	1012	CH 6	15569
436	CH 7	16631	1014	CH 7	16629
438	CH 8	16387	1016	CH 8	16389
440	CH 9	16572	1018	CH 9	16574
442	CH 10	17699	1020	CH 10	17697
444	CH 11	17891	1022	CH 11	17888
446	CH 12	17570	1024	CH 12	17556
448	CH 13	19570	1026	CH 13	19568
450	CH 14	16521	1028	CH 14	16521
452	CH 15	4125	1030	CH 15	OE
454	REFLECTOR 1 POSITION 14	3772	1032	REFLECTOR 1 COLD CAL POS	OE
456	REFLECTOR 2 POSITION 14	3772	1034	REFLECTOR 2 COLD CAL POS	OE
458	REFL 1 POS 14 2ND LOOK	4125	1036	REFL 1 COLD CAL 2ND LOOK	OE
460	REFL 2 POS 14 2ND LOOK	3772	1038	REFL 2 COLD CAL 2ND LOOK	OE
462	COLD CAL SAMPLE 14	15956	1040	COLD CAL DATA 1	0
464	CH 3	16433	1042	CH 3	0
466	CH 4	15651	1044	CH 4	0
468	CH 5	17147	1046	CH 5	0
470	CH 6	15570	1048	CH 6	0
472	CH 7	16631	1050	CH 7	0
474	CH 8	16389	1052	CH 8	0
476	CH 9	16571	1054	CH 9	0
478	CH 10	17695	1056	CH 10	0
480	CH 11	17889	1058	CH 11	0
482	CH 12	17566	1060	CH 12	0
484	CH 13	19555	1062	CH 13	0
486	CH 14	16522	1064	CH 14	0
488	CH 15	4125	1066	CH 15	0
490	REFLECTOR 1 POSITION 15	3772	1068	REFLECTOR 1 COLD CAL DATA 2	0
492	REFLECTOR 2 POSITION 15	3772	1070	REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK	4125		REFL 1 COLD CAL DATA 2	0
	REFL 2 POS 15 2ND LOOK	3772		REFL 2 COLD CAL DATA 2	0

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	COLD CAL SAMPLE 15	CH 3	1072		0
496		CH 4	16432		0
498		CH 5	15648		0
500		CH 6	17154		0
502		CH 7	15572		0
504		CH 8	16631		0
506		CH 9	16388		0
508		CH 10	16565		0
510		CH 11	17699		0
512		CH 12	17882		OE
514		CH 13	17570	REFLECTOR 1 WARM CAL POS	OE
516		CH 14	19587	REFLECTOR 2 WARM CAL POS	OE
518		CH 15	16522	REFL 1 WARM CAL 2ND LOOK	OE
520	REFLECTOR 1 POSITION 16	CH 3	4125	REFL 2 WARM CAL 2ND LOOK	0
522	REFLECTOR 2 POSITION 16	CH 4	3772	WARM CAL DATA 1	0
524	REFL 1 POS 16 2ND LOOK	CH 5	4125		0
526	REFL 2 POS 16 2ND LOOK	CH 6	3772		0
528	COLD CAL SAMPLE 16	CH 7	15954		0
530		CH 8	16430		0
532		CH 9	15651		0
534		CH 10	17154		0
536		CH 11	15574		0
538		CH 12	16628		0
540		CH 13	16388		0
542		CH 14	16563		0
544		CH 15	17695		0
546		CH 16	17887		0
548		CH 17	17563	WARM CAL DATA 2	0
550		CH 18	19551		0
552		CH 19	16521		0
554	REFLECTOR 1 POSITION 17	CH 3	4125		0
556	REFLECTOR 2 POSITION 17	CH 4	3772		0
558	REFL 1 POS 17 2ND LOOK	CH 5	4125		0
560	REFL 2 POS 17 2ND LOOK	CH 6	3772		0
562	COLD CAL SAMPLE 17	CH 7	15952		0
564		CH 8	16434		0
566		CH 9	15653		0
568		CH 10	17150		0
570		CH 11	15572		0

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE	DEG C
1090	SCAN MOTOR A1-1	17870	22.69	
1092	SCAN MOTOR A1-2	19230	24.57	
1094	FEED HORN A1-1	20061	27.19	
1096	FEED HORN A1-2	21325	29.65	
1098	RF MUX A1-1	22161	31.07	
1100	RF MUX A1-2	23576	33.93	
1102	LOCAL OSCILLATOR CHANNEL 3	24482	35.90	
1104	LOCAL OSCILLATOR CHANNEL 4	24896	36.02	
1106	LOCAL OSCILLATOR CHANNEL 5	23771	34.48	
1108	LOCAL OSCILLATOR CHANNEL 6	22439	30.98	
1110	LOCAL OSCILLATOR CHANNEL 7	22879	32.55	
1112	LOCAL OSCILLATOR CHANNEL 8	24282	35.28	
1114	LOCAL OSCILLATOR CHANNEL 15	23966	34.26	
1116	PLLO #2	22168	31.11	
1118	PLLO #1	25115	36.86	
1120	1553 INTERFACE	18104	36.25	
1122	MIXER/IF AMPLIFIER CHANNEL 3	23880	34.51	
1124	MIXER/IF AMPLIFIER CHANNEL 4	24041	34.27	
1126	MIXER/IF AMPLIFIER CHANNEL 5	23658	33.94	
1128	MIXER/IF AMPLIFIER CHANNEL 6	22461	31.64	
1130	MIXER/IF AMPLIFIER CHANNEL 7	22478	32.24	
1132	MIXER/IF AMPLIFIER CHANNEL 8	23959	34.47	
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	21926	30.84	
1136	MIXER/IF AMPLIFIER CHANNEL 15	23713	34.29	
1138	IF AMPLIFIER CHANNEL 11 THRU 14	23482	33.59	
1140	IF AMPLIFIER CHANNEL 9	23660	33.80	
1142	IF AMPLIFIER CHANNEL 10	23514	33.88	
1144	IF AMPLIFIER CHANNEL 11	22618	31.29	
1146	DC/DC CONVERTER	25212	36.33	
1148	IF AMPLIFIER CHANNEL 13	22202	30.60	
1150	IF AMPLIFIER CHANNEL 14	22561	31.74	
1152	IF AMPLIFIER CHANNEL 12	22366	31.16	
1154	RF SHELF A1-1	22929	32.53	
1156	RF SHELF A1-2	23666	33.33	
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	20562	28.01	
1160	A1-1 WARM LOAD 1	23328	23.66	
1162	A1-1 WARM LOAD 2	23827	23.78	
1164	A1-1 WARM LOAD 3	23318	23.79	
1166	A1-1 WARM LOAD 4	23401	23.78	
1168	A1-1 WARM LOAD CENTER	23600	23.79	
1170	A1-2 WARM LOAD 1	24703	25.84	
1172	A1-2 WARM LOAD 2	24759	25.86	
1174	A1-2 WARM LOAD 3	24768	25.84	
1176	A1-2 WARM LOAD 4	24763	25.74	
1178	A1-2 WARM LOAD CENTER	24771	25.84	
1180	TEMP SENSOR REFERENCE VOLTAGE	25270		

DESCRIPTION      STATUS

ANTENNA IN FULL SCAN MODE	NO
ANTENNA IN WARM CAL MODE	NO
ANTENNA IN COLD CAL MODE	YES
ANTENNA IN NADIR MODE	NO
COLD CAL. POSITION LSB	ZERO
COLD CAL. POSITION MSB	ZERO
PLO REDUNDANCY	PLO # 1
SCANNER A1-1 POWER	ON
SCANNER A1-2 POWER	ON
PLO #1 LOCK	YES
PLO #2 LOCK	OFF
ADC LATCHUP FLAG	ONE

ENGINEERING DATA

DESCRIPTION	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	22.3
A1-1 RF SHELF TEMPERATURE #1	29.4
A1-1 WARM LOAD TEMPERATURE	23.1
A1-2 SCANNER MOTOR TEMPERATURE	24.9
A1-2 RF SHELF TEMPERATURE #1	33.8
A1-2 WARM LOAD TEMPERATURE	25.4
A1-1 RF SHELF TEMPERATURE #2	29.3
A1-2 RF SHELF TEMPERATURE #2	33.5
DESCRIPTION	MA/VOLTS

SIGNAL PROCESSOR	+5 VDC	22100	4.9
	+15 VDC	21832	15.1
	-15 VDC	21795	-15.0
SCAN DRIVE	+5 VDC	22158	4.9
	+15 VDC	22213	14.9
	-15 VDC	21845	-15.1
PLO	+15 VDC	22548	14.8
	-15 VDC	22077	-15.2
RECEIVER	+8 VDC	21816	7.9
MIXER/IF AMPLIFIER A1-1	+10 VDC	21417	10.0
A1-2	+10 VDC	21427	10.0
LO CHANNEL 6	+10 VDC	21394	10.0
7	+10 VDC	21441	10.0
SPARE		32767	327.6
LO CHANNEL 3	+10 VDC	21255	10.1
4	+10 VDC	21201	10.1
5	+10 VDC	21378	10.0
8	+10 VDC	21306	10.0
15	+15 VDC	22015	15.0
QUIET BUS CURRENT		16421	2254.6
A1-1 NOISY POWER BUS CURRENT		63	0.4
A1-2 NOISY POWER BUS CURRENT		39	0.3

## PRT TEMPERATURES

## VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

## FIXED TARGET

## BASEPLATE

## THERMOCOUPLE TEMPERATURES

## FIXED TARGET SHROUD

## VARIABLE TARGET SHROUD

## FIXED TARGET N2

## VARIABLE TARGET N2

## HEATER N2

## FIXED TARGET FLOW METER

## VARIABLE TARGET FLOW METER

## BASEPLATE HEATER N2

## BASEPLATE N2

## BASEPLATE FLOW METER

## ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00



EOS	AI-03	..EXE:41	COLD CAL MODE	P1	19-NOV-98	12:25:00	AN	NUMBER	1319
[ 5 ]	SCIENCE	DATA	ELEMENT 0000						
[ 6 ]	CONTROL/STATUS	ELEMENT	00						
[ 7 ]	ENGINEERING	ELEMENT	00						
			COMMANDS						
[ 9 ]	SCANNER AI-1	POWER =	ON				PLLO#1	[ 15 ]	
[ 10 ]	SCANNER AI-2	POWER =	ON				COLD CAL POSITION 1 =	NO [ 16 ]	
[ 11 ]	ANTENNA FULL	SCAN MODE =	NO				2 =	YES [ 17 ]	
[ 12 ]		WARM CAL	=	NO			3 =	NO [ 18 ]	
[ 13 ]		COLD CAL	=	YES			COLD CAL POSITION 4 =	NO [ 19 ]	
[ 14 ]		NADIR	=	NO			RESET C&DH PROCESSOR	[ 20 ]	
							GSE MODE	[ 21 ]	
ENGR OK	POWER	ON	CHECKSUM	IN	6E59	CALC 6E59	SA28	1320	SA29 2628
		SCREEN ONLY	[ 2 ]			PRINT [ 3 ]	FULL	[ 1 ]	RETURN
	SELECT BUTTON 3								

Cold Cal Position 2  
Data in support of 33.5.3.3 Step 10  
EOS A1 S/N 202 S/O 560863 Op 0580  
TAIR 00434 Op 8030

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	COLD CAL SAMPLE 17	16617
2		00000011	574		16375
3	PACKET LENGTH	00000010	576		16545
4		10111111	578		17642
5	UNIT SERIAL NUMBER	00000011	580		17845
6		00000000	582		17504
7	INSTRUMENT MODE/STATUS	10011010	584		19491
8		00101000	586		16500
10	REFLECTOR 1 POSITION 1	4050	588	REFLECTOR 1 POSITION 18	4050
12	REFLECTOR 2 POSITION 1	3703	590	REFLECTOR 2 POSITION 18	3703
14	REFL 1 POS 1 2ND LOOK	4050	592	REFL 1 POS 18 2ND LOOK	4050
16	REFL 2 POS 1 2ND LOOK	3703	594	REFL 2 POS 18 2ND LOOK	3703
18	COLD CAL SAMPLE 1	15958	596	COLD CAL SAMPLE 18	15962
20		16422	598		16425
22		15651	600		15645
24		17134	602		17130
26		15555	604		15554
28		16619	606		16619
30		16378	608		16375
32		16544	610		16541
34		17643	612		17637
36		17849	614		17841
38		17510	616		17496
40		19483	618		19506
42		16501	620		16501
44	REFLECTOR 1 POSITION 2	4050	622	REFLECTOR 1 POSITION 19	4050
46	REFLECTOR 2 POSITION 2	3703	624	REFLECTOR 2 POSITION 19	3703
48	REFL 1 POS 2 2ND LOOK	4050	626	REFL 1 POS 19 2ND LOOK	4050
50	REFL 2 POS 2 2ND LOOK	3703	628	REFL 2 POS 19 2ND LOOK	3703
52	COLD CAL SAMPLE 2	15956	630	COLD CAL SAMPLE 19	15961
54		16424	632		16423
56		15651	634		15646
58		17135	636		17133
60		15550	638		15558
62		16618	640		16620
64		16375	642		16372
66		16545	644		16542
68		17640	646		17633
70		17836	648		17848
72		17492	650		17493
74		19497	652		19497
76		16500	654		16503
78	REFLECTOR 1 POSITION 3	4050	656	REFLECTOR 1 POSITION 20	4050
80	REFLECTOR 2 POSITION 3	3703	658	REFLECTOR 2 POSITION 20	3703
82	REFL 1 POS 3 2ND LOOK	4050	660	REFL 1 POS 20 2ND LOOK	4050
84	REFL 2 POS 3 2ND LOOK	3703	662	REFL 2 POS 20 2ND LOOK	3703
86	COLD CAL SAMPLE 3	15959	664	COLD CAL SAMPLE 20	15955
88		16421	666		16424
90		15651	668		15646
92		17135	670		17131

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15554	672	CH 7	15555
96	CH 8	16624	674	CH 8	16617
98	CH 9	16372	676	CH 9	16377
100	CH 10	16545	678	CH 10	16542
102	CH 11	17639	680	CH 11	17638
104	CH 12	17850	682	CH 12	17849
106	CH 13	17516	684	CH 13	17503
108	CH 14	19492	686	CH 14	19472
110	CH 15	16503	688	CH 15	16502
112	REFLECTOR 1 POSITION 4	4050	690	REFLECTOR 1 POSITION 21	4050
114	REFLECTOR 2 POSITION 4	3702	692	REFLECTOR 2 POSITION 21	3703
116	REFL 1 POS 4 2ND LOOK	4050	694	REFL 1 POS 21 2ND LOOK	4050
118	REFL 2 POS 4 2ND LOOK	3703	696	REFL 2 POS 21 2ND LOOK	3703
120	COLD CAL SAMPLE 4	15951	698	COLD CAL SAMPLE 21	15957
122	CH 3	16424	700	CH 3	16425
124	CH 4	15651	702	CH 4	15648
126	CH 5	17135	704	CH 5	17137
128	CH 6	15553	706	CH 6	15556
130	CH 7	16619	708	CH 7	16621
132	CH 8	16371	710	CH 8	16373
134	CH 9	16545	712	CH 9	16546
136	CH 10	17642	714	CH 10	17640
138	CH 11	17852	716	CH 11	17837
140	CH 12	17509	718	CH 12	17514
142	CH 13	19458	720	CH 13	19498
144	CH 14	16500	722	CH 14	16502
146	CH 15	4050	724	CH 15	4050
148	REFLECTOR 1 POSITION 5	3703	726	REFLECTOR 1 POSITION 22	3703
150	REFLECTOR 2 POSITION 5	3703	728	REFLECTOR 2 POSITION 22	3703
152	REFL 1 POS 5 2ND LOOK	4050	730	REFL 1 POS 22 2ND LOOK	4050
154	REFL 2 POS 5 2ND LOOK	3703	732	REFL 2 POS 22 2ND LOOK	3703
156	COLD CAL SAMPLE 5	15956	734	COLD CAL SAMPLE 22	15955
158	CH 3	16426	736	CH 3	16424
160	CH 4	15651	738	CH 4	15647
162	CH 5	17130	740	CH 5	17131
164	CH 6	15556	742	CH 6	15551
166	CH 7	16620	744	CH 7	16619
168	CH 8	16377	746	CH 8	16375
170	CH 9	16547	748	CH 9	16549
172	CH 10	17641	750	CH 10	17644
174	CH 11	17849	752	CH 11	17846
176	CH 12	17499	754	CH 12	17513
178	CH 13	19485	756	CH 13	19498
180	CH 14	16500	758	CH 14	16503
182	CH 15	4050	760	CH 15	4050
184	REFLECTOR 1 POSITION 6	3703	762	REFLECTOR 1 POSITION 23	3703
186	REFLECTOR 2 POSITION 6	3703	764	REFLECTOR 2 POSITION 23	3703
188	REFL 1 POS 6 2ND LOOK	4050	766	REFL 1 POS 23 2ND LOOK	4050
190	REFL 2 POS 6 2ND LOOK	3703	768	REFL 2 POS 23 2ND LOOK	3703
192	COLD CAL SAMPLE 6	15956	770	COLD CAL SAMPLE 23	15961
	CH 3	16423		CH 3	16420
	CH 4	15646		CH 4	15648
	CH 5			CH 5	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17135	772	CH 6	17136
196	CH 7	15553	774	CH 7	15555
198	CH 8	16618	776	CH 8	16620
200	CH 9	16373	778	CH 9	16375
202	CH 10	16548	780	CH 10	16547
204	CH 11	17640	782	CH 11	17642
206	CH 12	17858	784	CH 12	17848
208	CH 13	17506	786	CH 13	17500
210	CH 14	19502	788	CH 14	19482
212	CH 15	16503	790	CH 15	16502
214	REFLECTOR 1 POSITION 7	4050	792	REFLECTOR 1 POSITION 24	4050
216	REFLECTOR 2 POSITION 7	3703	794	REFLECTOR 2 POSITION 24	3703
218	REFL 1 POS 7 2ND LOOK	4050	796	REFL 1 POS 24 2ND LOOK	4050
220	REFL 2 POS 7 2ND LOOK	3703	798	REFL 2 POS 24 2ND LOOK	3703
222	COLD CAL SAMPLE 7	15956	800	COLD CAL SAMPLE 24	15959
224	CH 3	16425	802	CH 3	16424
226	CH 4	15648	804	CH 4	15647
228	CH 5	17131	806	CH 5	17134
230	CH 6	15554	808	CH 6	15556
232	CH 7	16617	810	CH 7	16618
234	CH 8	16376	812	CH 8	16376
236	CH 9	16547	814	CH 9	16545
238	CH 10	17636	816	CH 10	17639
240	CH 11	17845	818	CH 11	17854
242	CH 12	17520	820	CH 12	17494
244	CH 13	19479	822	CH 13	19504
246	CH 14	16501	824	CH 14	16501
248	CH 15	4050	826	CH 15	4050
250	REFLECTOR 1 POSITION 8	3703	828	REFLECTOR 1 POSITION 25	3703
252	REFLECTOR 2 POSITION 8	3703	830	REFLECTOR 2 POSITION 25	3703
254	REFL 1 POS 8 2ND LOOK	4050	832	REFL 1 POS 25 2ND LOOK	4050
256	REFL 2 POS 8 2ND LOOK	3703	834	REFL 2 POS 25 2ND LOOK	3703
258	COLD CAL SAMPLE 8	15960	836	COLD CAL SAMPLE 25	15955
260	CH 3	16422	838	CH 3	16426
262	CH 4	15650	840	CH 4	15645
264	CH 5	17133	842	CH 5	17131
266	CH 6	15552	844	CH 6	15558
268	CH 7	16617	846	CH 7	16617
270	CH 8	16377	848	CH 8	16372
272	CH 9	16543	850	CH 9	16539
274	CH 10	17639	852	CH 10	17642
276	CH 11	17846	854	CH 11	17846
278	CH 12	17501	856	CH 12	17498
280	CH 13	19502	858	CH 13	19501
282	CH 14	16503	860	CH 14	16500
284	CH 15	4050	862	CH 15	4050
286	REFLECTOR 1 POSITION 9	3703	864	REFLECTOR 1 POSITION 26	3703
288	REFLECTOR 2 POSITION 9	3703	866	REFLECTOR 2 POSITION 26	3703
290	REFL 1 POS 9 2ND LOOK	4050	868	REFL 1 POS 26 2ND LOOK	4050
292	REFL 2 POS 9 2ND LOOK	3703	870	REFL 2 POS 26 2ND LOOK	3703
	COLD CAL SAMPLE 9	15963		COLD CAL SAMPLE 26	15955
	CH 3	16421		CH 3	16424
	CH 4			CH 4	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15648	872	REFLECTOR 1 POSITION 27	15646
296	CH 6	17136	874	REFLECTOR 2 POSITION 27	17135
298	CH 7	15556	876	REFL 1 POS 27 2ND LOOK	15553
300	CH 8	16621	878	REFL 2 POS 27 2ND LOOK	16623
302	CH 9	16373	880	COLD CAL SAMPLE 27	16374
304	CH 10	16542	882	CH 3	16545
306	CH 11	17633	884	CH 4	17637
308	CH 12	17844	886	CH 5	17849
310	CH 13	17499	888	CH 6	17511
312	CH 14	19476	890	CH 7	19504
314	CH 15	16501	892	CH 8	16500
316	REFLECTOR 1 POSITION 10	4050	894	CH 9	4050
318	REFLECTOR 2 POSITION 10	3703	896	CH 10	3703
320	REFL 1 POS 10 2ND LOOK	4050	898	CH 11	4050
322	REFL 2 POS 10 2ND LOOK	3702	900	CH 12	3703
324	COLD CAL SAMPLE 10	15958	902	CH 13	15957
326	CH 3	16425	904	CH 14	16425
328	CH 4	15650	906	CH 15	15649
330	CH 5	17131	908	CH 1	17134
332	CH 6	15551	910	CH 2	15555
334	CH 7	16621	912	CH 3	16619
336	CH 8	16373	914	CH 4	16374
338	CH 9	16541	916	CH 5	16547
340	CH 10	17641	918	CH 6	17643
342	CH 11	17854	920	CH 7	17847
344	CH 12	17506	922	CH 8	17499
346	CH 13	19506	924	CH 9	19483
348	CH 14	16502	926	CH 10	16502
350	CH 15	4050	928	CH 11	4050
352	REFLECTOR 1 POSITION 11	3703	930	REFLECTOR 1 POSITION 28	3703
354	REFLECTOR 2 POSITION 11	3703	932	REFLECTOR 2 POSITION 28	3703
356	REFL 1 POS 11 2ND LOOK	4050	934	REFL 1 POS 28 2ND LOOK	4050
358	REFL 2 POS 11 2ND LOOK	3703	936	REFL 2 POS 28 2ND LOOK	3703
360	COLD CAL SAMPLE 11	15960	938	COLD CAL SAMPLE 28	15961
362	CH 3	16423	940	CH 3	16427
364	CH 4	15647	942	CH 4	15649
366	CH 5	17136	944	CH 5	17135
368	CH 6	15553	946	CH 6	15553
370	CH 7	16618	948	CH 7	16621
372	CH 8	16374	950	CH 8	16374
374	CH 9	16546	952	CH 9	16548
376	CH 10	17640	954	CH 10	17638
378	CH 11	17839	956	CH 11	17850
380	CH 12	17506	958	CH 12	17514
382	CH 13	19480	960	CH 13	19493
384	CH 14	16502	962	CH 14	16500
386	CH 15	4050	964	CH 15	4050
388	REFLECTOR 1 POSITION 12	3703	966	REFLECTOR 1 POSITION 29	3703
390	REFLECTOR 2 POSITION 12	3703	968	REFL 1 POS 29 2ND LOOK	4050
392	REFL 1 POS 12 2ND LOOK	4050	970	REFL 2 POS 29 2ND LOOK	3703
394	REFL 2 POS 12 2ND LOOK	3703		COLD CAL SAMPLE 29	15964
396	COLD CAL SAMPLE 12	15958		CH 3	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16424	972	CH 4	16427
396	CH 5	15646	974	CH 5	15648
398	CH 6	17135	976	CH 6	17131
400	CH 7	15551	978	CH 7	15552
402	CH 8	16620	980	CH 8	16619
404	CH 9	16373	982	CH 9	16373
406	CH 10	16545	984	CH 10	16545
408	CH 11	17639	986	CH 11	17640
410	CH 12	17850	988	CH 12	17846
412	CH 13	17497	990	CH 13	17518
414	CH 14	19513	992	CH 14	19509
416	CH 15	16504	994	CH 15	16501
418	REFLECTOR 1 POSITION 13	4050	996	REFLECTOR 1 POSITION 30	4050
420	REFLECTOR 2 POSITION 13	3702	998	REFLECTOR 2 POSITION 30	3703
422	REFL 1 POS 13 2ND LOOK	4050	1000	REFL 1 POS 30 2ND LOOK	4050
424	REFL 2 POS 13 2ND LOOK	3703	1002	REFL 2 POS 30 2ND LOOK	3703
426	COLD CAL SAMPLE 13	15958	1004	COLD CAL SAMPLE 30	15956
428	CH 3	16420	1006	CH 3	16425
430	CH 4	15647	1008	CH 4	15646
432	CH 5	17134	1010	CH 5	17130
434	CH 6	15550	1012	CH 6	15556
436	CH 7	16617	1014	CH 7	16620
438	CH 8	16373	1016	CH 8	16376
440	CH 9	16545	1018	CH 9	16550
442	CH 10	17641	1020	CH 10	17643
444	CH 11	17852	1022	CH 11	17849
446	CH 12	17497	1024	CH 12	17496
448	CH 13	19488	1026	CH 13	19518
450	CH 14	16501	1028	CH 14	16502
452	CH 15	4050	1030	CH 15	OE
454	REFLECTOR 1 POSITION 14	3703	1032	REFLECTOR 1 COLD CAL POS	OE
456	REFLECTOR 2 POSITION 14	3703	1034	REFLECTOR 2 COLD CAL POS	OE
458	REFL 1 POS 14 2ND LOOK	4050	1036	REFL 1 COLD CAL 2ND LOOK	OE
460	REFL 2 POS 14 2ND LOOK	3703	1038	REFL 2 COLD CAL 2ND LOOK	OE
462	COLD CAL SAMPLE 14	15952	1040	COLD CAL DATA 1	0
464	CH 3	16424	1042	CH 3	0
466	CH 4	15646	1044	CH 4	0
468	CH 5	17135	1046	CH 5	0
470	CH 6	15552	1048	CH 6	0
472	CH 7	16622	1050	CH 7	0
474	CH 8	16375	1052	CH 8	0
476	CH 9	16544	1054	CH 9	0
478	CH 10	17640	1056	CH 10	0
480	CH 11	17844	1058	CH 11	0
482	CH 12	17502	1060	CH 12	0
484	CH 13	19489	1062	CH 13	0
486	CH 14	16501	1064	CH 14	0
488	CH 15	4050	1066	CH 15	0
490	REFLECTOR 1 POSITION 15	3703	1068	REFLECTOR 1 COLD CAL DATA 2	0
492	REFLECTOR 2 POSITION 15	4050	1070	REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK	3703		REFL 1 COLD CAL DATA 2	0
	REFL 2 POS 15 2ND LOOK	3703		REFL 2 COLD CAL DATA 2	0

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	COLD CAL SAMPLE 15	CH 3	15958	1072	CH 7
496		CH 4	16420	1074	CH 8
498		CH 5	15647	1076	CH 9
500		CH 6	17135	1078	CH 10
502		CH 7	15553	1080	CH 11
504		CH 8	16622	1082	CH 12
506		CH 9	16373	1084	CH 13
508		CH 10	16545	1086	CH 14
510		CH 11	17645	1088	CH 15
512		CH 12	17851	1182	REFLECTOR 1 WARM CAL POS
514		CH 13	17513	1184	REFLECTOR 2 WARM CAL POS
516		CH 14	19484	1186	REFL 1 WARM CAL 2ND LOOK
518		CH 15	16502	1188	REFL 2 WARM CAL 2ND LOOK
520	REFLECTOR 1 POSITION 16	CH 16	4050	1190	WARM CAL DATA 1
522	REFLECTOR 2 POSITION 16	CH 16	3703	1192	CH 3
524	REFL 1 POS 16 2ND LOOK	CH 16	4050	1194	CH 4
526	REFL 2 POS 16 2ND LOOK	CH 16	3703	1196	CH 5
528	COLD CAL SAMPLE 16	CH 3	15959	1198	CH 6
530		CH 4	16424	1200	CH 7
532		CH 5	15649	1202	CH 8
534		CH 6	17134	1204	CH 9
536		CH 7	15555	1206	CH 10
538		CH 8	16620	1208	CH 11
540		CH 9	16372	1210	CH 12
542		CH 10	16546	1212	CH 13
544		CH 11	17644	1214	CH 14
546		CH 12	17854	1216	CH 15
548		CH 13	17507	1218	CH 3
550		CH 14	19485	1220	CH 4
552		CH 15	16502	1222	CH 5
554	REFLECTOR 1 POSITION 17	CH 17	4050	1224	CH 6
556	REFLECTOR 2 POSITION 17	CH 17	3703	1226	CH 7
558	REFL 1 POS 17 2ND LOOK	CH 17	4050	1228	CH 8
560	REFL 2 POS 17 2ND LOOK	CH 17	3703	1230	CH 9
562	COLD CAL SAMPLE 17	CH 3	15960	1232	CH 10
564		CH 4	16422	1234	CH 11
566		CH 5	15646	1236	CH 12
568		CH 6	17134	1238	CH 13
570		CH 7	15556	1240	CH 14
					CH 15

COLD CAL MODE

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE	DEG C
1090	SCAN MOTOR AI-1	17927	22.80	
1092	SCAN MOTOR AI-2	19327	24.75	
1094	FEED HORN AI-1	20206	27.47	
1096	FEED HORN AI-2	21481	29.95	
1098	RF MUX AI-1	22344	31.42	
1100	RF MUX AI-2	23762	34.29	
1102	LOCAL OSCILLATOR CHANNEL 3	24676	36.28	
1104	LOCAL OSCILLATOR CHANNEL 4	25088	36.40	
1106	LOCAL OSCILLATOR CHANNEL 5	23951	34.83	
1108	LOCAL OSCILLATOR CHANNEL 6	22602	31.29	
1110	LOCAL OSCILLATOR CHANNEL 7	23068	32.92	
1112	LOCAL OSCILLATOR CHANNEL 8	24473	35.67	
1114	LOCAL OSCILLATOR CHANNEL 15	24157	34.63	
1116	PILO #2	22358	31.47	
1118	PILO #1	25302	37.22	
1120	1553 INTERFACE	18296	36.62	
1122	MIXER/IF AMPLIFIER CHANNEL 3	24067	34.86	
1124	MIXER/IF AMPLIFIER CHANNEL 4	24229	34.64	
1126	MIXER/IF AMPLIFIER CHANNEL 5	23842	34.29	
1128	MIXER/IF AMPLIFIER CHANNEL 6	22643	31.99	
1130	MIXER/IF AMPLIFIER CHANNEL 7	22665	32.59	
1132	MIXER/IF AMPLIFIER CHANNEL 8	24147	34.84	
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	22109	31.19	
1136	MIXER/IF AMPLIFIER CHANNEL 15	23902	34.66	
1138	IF AMPLIFIER CHANNEL 11 THRU 14	23672	33.99	
1140	IF AMPLIFIER CHANNEL 9	23851	34.27	
1142	IF AMPLIFIER CHANNEL 10	23703	34.24	
1144	IF AMPLIFIER CHANNEL 11	22811	31.66	
1146	DC/DC CONVERTER	25347	36.59	
1148	IF AMPLIFIER CHANNEL 13	22393	30.97	
1150	IF AMPLIFIER CHANNEL 14	22752	32.11	
1152	IF AMPLIFIER CHANNEL 12	22558	31.53	
1154	RF SHELF AI-1	23117	32.89	
1156	RF SHELF AI-2	23843	33.67	
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	20715	28.30	
1160	AI-1 WARM LOAD 1	23435	23.87	
1162	AI-1 WARM LOAD 2	23933	23.99	
1164	AI-1 WARM LOAD 3	23429	24.01	
1166	AI-1 WARM LOAD 4	23509	23.99	
1168	AI-1 WARM LOAD CENTER	23706	24.00	
1170	AI-2 WARM LOAD 1	24852	26.13	
1172	AI-2 WARM LOAD 2	24909	26.15	
1174	AI-2 WARM LOAD 3	24916	26.14	
1176	AI-2 WARM LOAD 4	24911	26.03	
1178	AI-2 WARM LOAD CENTER	24922	26.14	
1180	TEMP SENSOR REFERENCE VOLTAGE	25270		



DESCRIPTION	STATUS
ANTENNA IN FULL SCAN MODE	NO
ANTENNA IN WARM CAL MODE	NO
ANTENNA IN COLD CAL MODE	YES
ANTENNA IN NADIR MODE	NO
COLD CAL. POSITION LSB	ONE
COLD CAL. POSITION MSB	ZERO
PLO REDUNDANCY	PLO # 1
SCANNER A1-1 POWER	ON
SCANNER A1-2 POWER	ON
PLO #1 LOCK	YES
PLO #2 LOCK	OFF
ADC LATCHUP FLAG	ONE

DESCRIPTION	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	22.3
A1-1 RF SHELF TEMPERATURE #1	29.4
A1-1 WARM LOAD TEMPERATURE	23.1
A1-2 SCANNER MOTOR TEMPERATURE	24.9
A1-2 RF SHELF TEMPERATURE #1	33.8
A1-2 WARM LOAD TEMPERATURE	25.4
A1-1 RF SHELF TEMPERATURE #2	29.3
A1-2 RF SHELF TEMPERATURE #2	33.5

DESCRIPTION	VALUE	MA/VOLTS
SIGNAL PROCESSOR	22051	4.9
	21829	15.1
	21798	-15.0
SCAN DRIVE	22158	4.9
	22206	14.9
	21855	-15.1
PLO	22551	14.8
	22082	-15.2
RECEIVER	21815	7.9
MIXER/IF AMPLIFIER A1-1	21416	10.0
A1-2	21429	10.0
LO CHANNEL 6	21391	10.0
7	21437	10.0
SPARE	32767	327.7
LO CHANNEL 3	21240	10.1
4	21185	10.1
5	21378	10.0
8	21307	10.0
15	22014	15.0
QUIET BUS CURRENT	16300	2239.9
A1-1 NOISY POWER BUS CURRENT	64	0.2
A1-2 NOISY POWER BUS CURRENT	42	0.1

ENGINEERING DATA

## PRT TEMPERATURES

## VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

## BASEPLATE

## THERMOCOUPLE TEMPERATURES

## FIXED TARGET SHROUD

## VARIABLE TARGET SHROUD

## FIXED TARGET N2

## VARIABLE TARGET N2

## HEATER N2

## FIXED TARGET FLOW METER

## VARIABLE TARGET FLOW METER

## BASEPLATE HEATER N2

## BASEPLATE N2

## BASEPLATE FLOW METER

## ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00

```

EOS  A1-03 ...EXE:41 COLD CAL MODE  P1 19-NOV-98 12:33:42  AN NUMBER 1384
[ 5 ] SCIENCE DATA ELEMENT 0000
[ 6 ] CONTROL/STATUS ELEMENT 00
[ 7 ] ENGINEERING ELEMENT 00

      COMMANDS
[ 9 ] SCANNER A1-1 POWER =      ON      COLD CAL POSITION 1 =      NO [ 15 ]
[10 ] SCANNER A1-2 POWER =      ON      2 =      YES [ 16 ]
[11 ] ANTENNA FULL SCAN MODE =      NO      3 =      NO [ 17 ]
[12 ]      WARM CAL      =      NO      COLD CAL POSITION 4 =      NO [ 18 ]
[13 ]      COLD CAL      =      YES      RESET C&DH PROCESSOR [ 19 ]
[14 ]      NADIR      =      NO      GSE MODE [ 20 ]

ENGR OK  POWER  ON  CHECKSUM  IN 6027 CALC 6027  SA28 1385 SA29 2758
        SCREEN ONLY [ 2 ] PRINT [ 3 ] FULL [ 1 ] RETURN
SELECT BUTTON 3

```

Cold Cal Position 2  
 Data in support of 3.3.5.33 Step 14  
 EOS A1 S/N 202 S/O 560863 Op 0580  
 TAR 00434 Op 8030

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	COLD CAL SAMPLE 17	16614
2		00000011	574	CH 8	16370
3	PACKET LENGTH	00000010	576	CH 9	16542
4		10111111	578	CH 10	17624
5	UNIT SERIAL NUMBER	00000011	580	CH 11	17827
6		00000000	582	CH 12	17495
7	INSTRUMENT MODE/STATUS	10011010	584	CH 13	19479
8		00101000	586	CH 14	16496
10	REFLECTOR 1 POSITION 1	4049	588	CH 15	4048
12	REFLECTOR 2 POSITION 1	3696	590	REFLECTOR 1 POSITION 18	3696
14	REFL 1 POS 1 2ND LOOK	4049	592	REFLECTOR 2 POSITION 18	3696
16	REFL 2 POS 1 2ND LOOK	3696	594	REFL 1 POS 18 2ND LOOK	4048
18	COLD CAL SAMPLE 1	15945	596	REFL 2 POS 18 2ND LOOK	3696
20	CH 3	16417	598	COLD CAL SAMPLE 18	15948
22	CH 4	15638	600	CH 3	16419
24	CH 5	17130	602	CH 4	15636
26	CH 6	15550	604	CH 5	17130
28	CH 7	16615	606	CH 6	15548
30	CH 8	16366	608	CH 7	16611
32	CH 9	16542	610	CH 8	16373
34	CH 10	17621	612	CH 9	16537
36	CH 11	17833	614	CH 10	17627
38	CH 12	17490	616	CH 11	17825
40	CH 13	19456	618	CH 12	17489
42	CH 14	16495	620	CH 13	19503
44	REFLECTOR 1 POSITION 2	4048	622	CH 14	16497
46	REFLECTOR 2 POSITION 2	3696	624	CH 15	4048
48	REFL 1 POS 2 2ND LOOK	4048	626	REFLECTOR 1 POSITION 19	3696
50	REFL 2 POS 2 2ND LOOK	3696	628	REFLECTOR 2 POSITION 19	4048
52	COLD CAL SAMPLE 2	15948	630	REFL 1 POS 19 2ND LOOK	4048
54	CH 3	16422	632	REFL 2 POS 19 2ND LOOK	3696
56	CH 4	15641	634	COLD CAL SAMPLE 19	15953
58	CH 5	17128	636	CH 3	16417
60	CH 6	15549	638	CH 4	15643
62	CH 7	16617	640	CH 5	17131
64	CH 8	16366	642	CH 6	15553
66	CH 9	16541	644	CH 7	16617
68	CH 10	17623	646	CH 8	16371
70	CH 11	17824	648	CH 9	16544
72	CH 12	17488	650	CH 10	17623
74	CH 13	19452	652	CH 11	17833
76	CH 14	16496	654	CH 12	17492
78	REFLECTOR 1 POSITION 3	4048	656	CH 13	19452
80	REFLECTOR 2 POSITION 3	3696	658	CH 14	16497
82	REFL 1 POS 3 2ND LOOK	4048	660	CH 15	4048
84	REFL 2 POS 3 2ND LOOK	3696	662	REFLECTOR 1 POSITION 20	3696
86	COLD CAL SAMPLE 3	15944	664	REFLECTOR 2 POSITION 20	4048
88	CH 3	16415	666	REFL 1 POS 20 2ND LOOK	3696
90	CH 4	15642	668	REFL 2 POS 20 2ND LOOK	15947
92	CH 5	17130	670	COLD CAL SAMPLE 20	16417
	CH 6			CH 3	15642
				CH 4	17132
				CH 5	
				CH 6	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15550	672	CH 7	15553
96	CH 8	16614	674	CH 8	16615
98	CH 9	16368	676	CH 9	16368
100	CH 10	16544	678	CH 10	16543
102	CH 11	17620	680	CH 11	17622
104	CH 12	17823	682	CH 12	17830
106	CH 13	17491	684	CH 13	17493
108	CH 14	19457	686	CH 14	19474
110	CH 15	16498	688	CH 15	16497
112	REFLECTOR 1 POSITION 4	4049	690	REFLECTOR 1 POSITION 21	4048
114	REFLECTOR 2 POSITION 4	3697	692	REFLECTOR 2 POSITION 21	3696
116	REFL 1 POS 4 2ND LOOK	4048	694	REFL 1 POS 21 2ND LOOK	4048
118	REFL 2 POS 4 2ND LOOK	3696	696	REFL 2 POS 21 2ND LOOK	3696
120	COLD CAL SAMPLE 4	15943	698	COLD CAL SAMPLE 21	15953
122	CH 3	16415	700	CH 3	16415
124	CH 4	15644	702	CH 4	15641
126	CH 5	17132	704	CH 5	17130
128	CH 6	15549	706	CH 6	15549
130	CH 7	16612	708	CH 7	16613
132	CH 8	16370	710	CH 8	16367
134	CH 9	16543	712	CH 9	16540
136	CH 10	17628	714	CH 10	17622
138	CH 11	17824	716	CH 11	17830
140	CH 12	17487	718	CH 12	17489
142	CH 13	19480	720	CH 13	19461
144	CH 14	16498	722	CH 14	16498
146	CH 15	4049	724	CH 15	4048
148	REFLECTOR 1 POSITION 5	3696	726	REFLECTOR 1 POSITION 22	3696
150	REFLECTOR 2 POSITION 5	4048	728	REFLECTOR 2 POSITION 22	4048
152	REFL 1 POS 5 2ND LOOK	3696	730	REFL 1 POS 22 2ND LOOK	3696
154	REFL 2 POS 5 2ND LOOK	15949	732	REFL 2 POS 22 2ND LOOK	15945
156	COLD CAL SAMPLE 5	16416	734	COLD CAL SAMPLE 22	16418
158	CH 3	15640	736	CH 3	15637
160	CH 4	17130	738	CH 4	17127
162	CH 5	15550	740	CH 5	15550
164	CH 6	16616	742	CH 6	16610
166	CH 7	16368	744	CH 7	16370
168	CH 8	16536	746	CH 8	16543
170	CH 9	17625	748	CH 9	17626
172	CH 10	17826	750	CH 10	17836
174	CH 11	17480	752	CH 11	17480
176	CH 12	19486	754	CH 12	19490
178	CH 13	16496	756	CH 13	16497
180	CH 14	4049	758	CH 14	4048
182	CH 15	3696	760	CH 15	3696
184	REFLECTOR 1 POSITION 6	4048	762	REFLECTOR 1 POSITION 23	4048
186	REFLECTOR 2 POSITION 6	3696	764	REFLECTOR 2 POSITION 23	3696
188	REFL 1 POS 6 2ND LOOK	15949	766	REFL 1 POS 23 2ND LOOK	15949
190	REFL 2 POS 6 2ND LOOK	16418	768	REFL 2 POS 23 2ND LOOK	16416
192	COLD CAL SAMPLE 6	15641	770	COLD CAL SAMPLE 23	15637

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17133	772	REFLECTOR 1 POSITION 24	4048
196	CH 7	15552	774	REFLECTOR 2 POSITION 24	3696
198	CH 8	16611	776	REFL 1 POS 24 2ND LOOK	4048
200	CH 9	16366	778	REFL 2 POS 24 2ND LOOK	3696
202	CH 10	16540	780	COLD CAL SAMPLE 24	15949
204	CH 11	17624	782	CH 3	16419
206	CH 12	17822	784	CH 4	15640
208	CH 13	17481	786	CH 5	17132
210	CH 14	19481	788	CH 6	15550
212	CH 15	16497	790	CH 7	16369
214	REFLECTOR 1 POSITION 7	4048	792	CH 8	16612
216	REFLECTOR 2 POSITION 7	3696	794	CH 9	16369
218	REFL 1 POS 7 2ND LOOK	4048	796	CH 10	16542
220	REFL 2 POS 7 2ND LOOK	3696	798	CH 11	17618
222	COLD CAL SAMPLE 7	15949	800	CH 12	17836
224	CH 3	15949	802	CH 13	17490
226	CH 4	16419	804	CH 14	19476
228	CH 5	15640	822	CH 15	16496
230	CH 6	17132	824	REFLECTOR 1 POSITION 25	4048
232	CH 7	15550	826	REFLECTOR 2 POSITION 25	3696
234	CH 8	16369	828	REFL 1 POS 25 2ND LOOK	4048
236	CH 9	16542	830	REFL 2 POS 25 2ND LOOK	3697
238	CH 10	17618	832	COLD CAL SAMPLE 25	15948
240	CH 11	17836	834	CH 3	16413
242	CH 12	17490	836	CH 4	15639
244	CH 13	19476	838	CH 5	17127
246	CH 14	16496	842	CH 6	15549
248	CH 15	4049	844	CH 7	16611
250	REFLECTOR 1 POSITION 8	3696	846	CH 8	16366
252	REFLECTOR 2 POSITION 8	4049	848	CH 9	16540
254	REFL 1 POS 8 2ND LOOK	3696	850	CH 10	17625
256	REFL 2 POS 8 2ND LOOK	15945	852	CH 11	17837
258	COLD CAL SAMPLE 8	15945	854	CH 12	17488
260	CH 3	16416	856	CH 13	19461
262	CH 4	15640	858	CH 14	16495
264	CH 5	17134	860	CH 15	4049
266	CH 6	15552	862	REFLECTOR 1 POSITION 26	3696
268	CH 7	16613	864	REFLECTOR 2 POSITION 26	3696
270	CH 8	16370	866	REFL 1 POS 26 2ND LOOK	4048
272	CH 9	16537	868	REFL 2 POS 26 2ND LOOK	3696
274	CH 10	17620	870	COLD CAL SAMPLE 26	15949
276	CH 11	17825		CH 3	16416
278	CH 12	17486		CH 4	
280	CH 13	19459			
282	CH 14	16497			
284	CH 15	4048			
286	REFLECTOR 1 POSITION 9	3696			
288	REFLECTOR 2 POSITION 9	4048			
290	REFL 1 POS 9 2ND LOOK	3696			
292	REFL 2 POS 9 2ND LOOK	15949			
	COLD CAL SAMPLE 9	16422			
	CH 3				
	CH 4				



ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16418	972	CH 4	16415
396	CH 5	15642	974	CH 5	15638
398	CH 6	17133	976	CH 6	17132
400	CH 7	15550	978	CH 7	15551
402	CH 8	16614	980	CH 8	16615
404	CH 9	16368	982	CH 9	16369
406	CH 10	16543	984	CH 10	16545
408	CH 11	17620	986	CH 11	17621
410	CH 12	17818	988	CH 12	17834
412	CH 13	17488	990	CH 13	17500
414	CH 14	19491	992	CH 14	19461
416	CH 15	16498	994	CH 15	16498
418	REFLECTOR 1 POSITION 13	4049	996	REFLECTOR 1 POSITION 30	4049
420	REFLECTOR 2 POSITION 13	3696	998	REFLECTOR 2 POSITION 30	3696
422	REFL 1 POS 13 2ND LOOK	4048	1000	REFL 1 POS 30 2ND LOOK	4049
424	REFL 2 POS 13 2ND LOOK	3696	1002	REFL 2 POS 30 2ND LOOK	3696
426	COLD CAL SAMPLE 13	15953	1004	COLD CAL SAMPLE 30	15949
428	CH 3	16419	1006	CH 3	16417
430	CH 4	15640	1008	CH 4	15641
432	CH 5	17130	1010	CH 5	17130
434	CH 6	15550	1012	CH 6	15549
436	CH 7	16613	1014	CH 7	16613
438	CH 8	16370	1016	CH 8	16370
440	CH 9	16536	1018	CH 9	16541
442	CH 10	17627	1020	CH 10	17621
444	CH 11	17835	1022	CH 11	17823
446	CH 12	17473	1024	CH 12	17493
448	CH 13	19497	1026	CH 13	19471
450	CH 14	16496	1028	CH 14	16497
452	CH 15	4049	1030	CH 15	0E
454	REFLECTOR 1 POSITION 14	3696	1032	REFLECTOR 1 COLD CAL POS	0E
456	REFLECTOR 2 POSITION 14	4049	1034	REFLECTOR 2 COLD CAL POS	0E
458	REFL 1 POS 14 2ND LOOK	3696	1036	REFL 1 COLD CAL 2ND LOOK	0E
460	REFL 2 POS 14 2ND LOOK	15952	1038	REFL 2 COLD CAL 2ND LOOK	0E
462	COLD CAL SAMPLE 14	16416	1040	COLD CAL DATA 1	0
464	CH 3	15636	1042	CH 3	0
466	CH 4	17128	1044	CH 4	0
468	CH 5	15550	1046	CH 5	0
470	CH 6	16611	1048	CH 6	0
472	CH 7	16369	1050	CH 7	0
474	CH 8	16540	1052	CH 8	0
476	CH 9	17623	1054	CH 9	0
478	CH 10	17819	1056	CH 10	0
480	CH 11	17460	1058	CH 11	0
482	CH 12	19472	1060	CH 12	0
484	CH 13	16496	1062	CH 13	0
486	CH 14	4049	1064	CH 14	0
488	CH 15	3696	1066	CH 15	0
490	REFLECTOR 1 POSITION 15	3696	1068	REFLECTOR 1 COLD CAL DATA 2	0
492	REFLECTOR 2 POSITION 15	4049	1070	REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK	3696		REFL 1 POS 30 2ND LOOK	0
	REFL 2 POS 15 2ND LOOK			REFL 2 POS 30 2ND LOOK	0



ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	COLD CAL SAMPLE 15	CH 3	15946	1072	CH 7
496		CH 4	16416	1074	CH 8
498		CH 5	15638	1076	CH 9
500		CH 6	17129	1078	CH 10
502		CH 7	15551	1080	CH 11
504		CH 8	16618	1082	CH 12
506		CH 9	16373	1084	CH 13
508		CH 10	16535	1086	CH 14
510		CH 11	17623	1088	CH 15
512		CH 12	17820	1182	REFLECTOR 1 WARM CAL POS
514		CH 13	17476	1184	REFLECTOR 2 WARM CAL POS
516		CH 14	19467	1186	REFL 1 WARM CAL 2ND LOOK
518		CH 15	16496	1188	REFL 2 WARM CAL 2ND LOOK
520	REFLECTOR 1 POSITION 16		4048	1190	WARM CAL DATA 1
522	REFLECTOR 2 POSITION 16		3696	1192	CH 3
524	REFL 1 POS 16 2ND LOOK		4048	1194	CH 4
526	REFL 2 POS 16 2ND LOOK		3696	1196	CH 5
528	COLD CAL SAMPLE 16	CH 3	15945	1198	CH 6
530		CH 4	16419	1200	CH 7
532		CH 5	15640	1202	CH 8
534		CH 6	17131	1204	CH 9
536		CH 7	15550	1206	CH 10
538		CH 8	16613	1208	CH 11
540		CH 9	16370	1210	CH 12
542		CH 10	16544	1212	CH 13
544		CH 11	17625	1214	CH 14
546		CH 12	17831	1216	CH 15
548		CH 13	17482	1218	CH 3
550		CH 14	19483	1220	CH 4
552		CH 15	16498	1222	CH 5
554	REFLECTOR 1 POSITION 17		4048	1224	CH 6
556	REFLECTOR 2 POSITION 17		3696	1226	CH 7
558	REFL 1 POS 17 2ND LOOK		4048	1228	CH 8
560	REFL 2 POS 17 2ND LOOK		3696	1230	CH 9
562	COLD CAL SAMPLE 17	CH 3	15946	1232	CH 10
564		CH 4	16417	1234	CH 11
566		CH 5	15637	1236	CH 12
568		CH 6	17134	1238	CH 13
570		CH 7	15549	1240	CH 14
					CH 15

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE	DEG C
1090	SCAN MOTOR A1-1	17968	22.87	
1092	SCAN MOTOR A1-2	19377	24.85	
1094	FEED HORN A1-1	20255	27.56	
1096	FEED HORN A1-2	21535	30.06	
1098	RF MUX A1-1	22409	31.54	
1100	RF MUX A1-2	23830	34.42	
1102	LOCAL OSCILLATOR CHANNEL 3	24742	36.40	
1104	LOCAL OSCILLATOR CHANNEL 4	25158	36.53	
1106	LOCAL OSCILLATOR CHANNEL 5	24015	34.96	
1108	LOCAL OSCILLATOR CHANNEL 6	22655	31.39	
1110	LOCAL OSCILLATOR CHANNEL 7	23135	33.05	
1112	LOCAL OSCILLATOR CHANNEL 8	24537	35.79	
1114	LOCAL OSCILLATOR CHANNEL 15	24229	34.77	
1116	PLLO #2	22425	31.60	
1118	PLLO #1	25370	37.35	
1120	1553 INTERFACE	18366	36.76	
1122	MIXER/IF AMPLIFIER CHANNEL 3	24136	34.99	
1124	MIXER/IF AMPLIFIER CHANNEL 4	24297	34.77	
1126	MIXER/IF AMPLIFIER CHANNEL 5	23908	34.42	
1128	MIXER/IF AMPLIFIER CHANNEL 6	22712	32.13	
1130	MIXER/IF AMPLIFIER CHANNEL 7	22736	32.73	
1132	MIXER/IF AMPLIFIER CHANNEL 8	24217	34.98	
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	22177	31.32	
1136	MIXER/IF AMPLIFIER CHANNEL 15	23974	34.80	
1138	IF AMPLIFIER CHANNEL 11 THRU 14	23741	34.14	
1140	IF AMPLIFIER CHANNEL 9	23922	34.40	
1142	IF AMPLIFIER CHANNEL 10	23773	34.38	
1144	IF AMPLIFIER CHANNEL 11	22880	31.79	
1146	DC/DC CONVERTER	25393	36.68	
1148	IF AMPLIFIER CHANNEL 13	22463	31.10	
1150	IF AMPLIFIER CHANNEL 14	22821	32.24	
1152	IF AMPLIFIER CHANNEL 12	22628	31.66	
1154	RF SHELF A1-1	23183	33.02	
1156	RF SHELF A1-2	23911	33.80	
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	20772	28.41	
1160	A1-1 WARM LOAD 1	23481	23.96	
1162	A1-1 WARM LOAD 2	23974	24.07	
1164	A1-1 WARM LOAD 3	23475	24.10	
1166	A1-1 WARM LOAD 4	23554	24.08	
1168	A1-1 WARM LOAD CENTER	23750	24.08	
1170	A1-2 WARM LOAD 1	24909	26.25	
1172	A1-2 WARM LOAD 2	24966	26.27	
1174	A1-2 WARM LOAD 3	24980	26.27	
1176	A1-2 WARM LOAD 4	24967	26.14	
1178	A1-2 WARM LOAD CENTER	24979	26.26	
1180	TEMP SENSOR REFERENCE VOLTAGE	25270		

DESCRIPTION STATUS

ANTENNA IN FULL SCAN MODE NO  
 ANTENNA IN WARM CAL MODE NO  
 ANTENNA IN COLD CAL MODE YES  
 ANTENNA IN NADIR MODE NO  
 COLD CAL. POSITION LSB ONE  
 COLD CAL. POSITION MSB ZERO  
 PLO REDUNDANCY PLO # 1  
 SCANNER A1-1 POWER ON  
 SCANNER A1-2 POWER ON  
 PLO #1 LOCK YES  
 PLO #2 LOCK OFF  
 ADC LATCHUP FLAG ONE

ENGINEERING DATA

DESCRIPTION DEG C  
 A1-1 SCANNER MOTOR TEMPERATURE 22.5  
 A1-1 RF SHELF TEMPERATURE #1 22.5  
 A1-1 WARM LOAD TEMPERATURE 29.8  
 A1-2 SCANNER MOTOR TEMPERATURE 23.4  
 A1-2 RF SHELF TEMPERATURE #1 25.2  
 A1-2 WARM LOAD TEMPERATURE 34.3  
 A1-1 RF SHELF TEMPERATURE #2 25.7  
 A1-2 RF SHELF TEMPERATURE #2 29.6  
 DESCRIPTION 33.9  
 VALUE MA/VOLTS

SIGNAL PROCESSOR +5 VDC 22085 4.9  
 +15 VDC 21832 15.1  
 -15 VDC 21796 -15.0  
 SCAN DRIVE +5 VDC 22150 4.9  
 +15 VDC 22185 14.9  
 -15 VDC 21836 -15.1  
 PLO +15 VDC 22550 14.8  
 -15 VDC 22081 -15.2  
 RECEIVER 21814 7.9  
 MIXER/IF AMPLIFIER A1-1 +10 VDC 21417 10.0  
 A1-2 +10 VDC 21429 10.0  
 LO CHANNEL 6 +10 VDC 21392 10.0  
 7 +10 VDC 21446 10.0  
 SPARE 32767 327.5  
 LO CHANNEL 3 21245 10.1  
 4 +10 VDC 21183 10.1  
 5 +10 VDC 21376 10.0  
 8 +10 VDC 21306 10.0  
 15 22014 15.0  
 16424 2254.2  
 QUIET BUS CURRENT 67 0.5  
 A1-1 NOISY POWER BUS CURRENT 40 0.4  
 A1-2 NOISY POWER BUS CURRENT

## COLD CAL MODE

## PRT TEMPERATURES

## VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

## FIXED TARGET

## BASEPLATE

## THERMOCOUPLE TEMPERATURES

## FIXED TARGET SHROUD

## VARIABLE TARGET SHROUD

## FIXED TARGET N2

## VARIABLE TARGET N2

## HEATER N2

## FIXED TARGET FLOW METER

## VARIABLE TARGET FLOW METER

## BASEPLATE HEATER N2

## BASEPLATE N2

## BASEPLATE FLOW METER

## ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00

```

EOS A1-03 .EXE;41 COLD CAL MODE P1 19-NOV-98 13:00:30 . LN NUMBER 1585
[ 5 ] SCIENCE DATA ELEMENT 0000

[ 6 ] CONTROL/STATUS ELEMENT 00

[ 7 ] ENGINEERING ELEMENT 00

      COMMANDS
      PLO POWER = PLO#1 [ 15 ]

[ 9 ] SCANNER A1-1 POWER = ON COLD CAL POSITION 1 = NO [ 16 ]

[ 10 ] SCANNER A1-2 POWER = ON 2 = NO [ 17 ]

[ 11 ] ANTENNA FULL SCAN MODE = NO 3 = YES [ 18 ]

[ 12 ] WARM CAL = NO COLD CAL POSITION 4 = NO [ 19 ]

[ 13 ] COLD CAL = YES RESET C&DH PROCESSOR [ 20 ]

[ 14 ] NADIR = NO GSE MODE [ 21 ]

ENGR OK POWER ON CHECKSUM IN B34B CALC B34B SA28 1586 SA29 3160
SCREEN ONLY [ 2 ] PRINT [ 3 ] FULL [ 1 ] RETURN

SELECT BUTTON 3

```

Cold Cal Position 3  
 Data in Support of 33533 Step 22  
 EOS A1 S/N 202 S/O 560863 Op 0580  
 TAR 00434 Op 8030

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	COLD CAL SAMPLE 17	16605
2		00000011	574	CH 8	16354
3	PACKET LENGTH	00000010	576	CH 9	16516
4		10111111	578	CH 10	17570
5	UNIT SERIAL NUMBER	00000011	580	CH 11	17769
6		00000000	582	CH 12	17423
7	INSTRUMENT MODE/STATUS	10011010	584	CH 13	19398
8		01001000	586	CH 14	16480
10	REFLECTOR 1 POSITION 1	3975	588	CH 15	3975
12	REFLECTOR 2 POSITION 1	3620	590	REFLECTOR 1 POSITION 18	3620
14	REFL 1 POS 1 2ND LOOK	3975	592	REFLECTOR 2 POSITION 18	3975
16	REFL 2 POS 1 2ND LOOK	3620	594	REFL 1 POS 18 2ND LOOK	3975
18	COLD CAL SAMPLE 1	15952	596	REFL 2 POS 18 2ND LOOK	3620
20	CH 3	16395	598	COLD CAL SAMPLE 18	15943
22	CH 4	15622	600	CH 3	16399
24	CH 5	17114	602	CH 4	15620
26	CH 6	15537	604	CH 5	17117
28	CH 7	16609	606	CH 6	15530
30	CH 8	16350	608	CH 7	16609
32	CH 9	16517	610	CH 8	16351
34	CH 10	17572	612	CH 9	16517
36	CH 11	17760	614	CH 10	17573
38	CH 12	17434	616	CH 11	17761
40	CH 13	19391	618	CH 12	17419
42	CH 14	16479	620	CH 13	19384
44	CH 15	3975	622	CH 14	16478
46	REFLECTOR 1 POSITION 2	3620	624	CH 15	3975
48	REFLECTOR 2 POSITION 2	3975	626	REFLECTOR 1 POSITION 19	3620
50	REFL 1 POS 2 2ND LOOK	3620	628	REFLECTOR 2 POSITION 19	3975
52	REFL 2 POS 2 2ND LOOK	15948	630	REFL 1 POS 19 2ND LOOK	3975
54	COLD CAL SAMPLE 2	16400	632	REFL 2 POS 19 2ND LOOK	3620
56	CH 3	15625	634	COLD CAL SAMPLE 19	15949
58	CH 4	17115	636	CH 3	16398
60	CH 5	15535	638	CH 4	15622
62	CH 6	16605	640	CH 5	17114
64	CH 7	16351	642	CH 6	15534
66	CH 8	16513	644	CH 7	16609
68	CH 9	17576	646	CH 8	16351
70	CH 10	17765	648	CH 9	16519
72	CH 11	17427	650	CH 10	17573
74	CH 12	19397	652	CH 11	17766
76	CH 13	16480	654	CH 12	17431
78	CH 14	3975	656	CH 13	19402
80	CH 15	3620	658	CH 14	16479
82	REFLECTOR 1 POSITION 3	3620	660	CH 15	3975
84	REFL 1 POS 3 2ND LOOK	3975	662	REFLECTOR 1 POSITION 20	3620
86	REFL 2 POS 3 2ND LOOK	3620	664	REFLECTOR 2 POSITION 20	3975
88	COLD CAL SAMPLE 3	15945	666	REFL 1 POS 20 2ND LOOK	3975
90	CH 3	16397	668	REFL 2 POS 20 2ND LOOK	3620
92	CH 4	15619	670	COLD CAL SAMPLE 20	15943
	CH 5	17122		CH 3	16398
	CH 6			CH 4	15620
				CH 5	17119

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15535	672	CH 7	15535
96	CH 8	16608	674	CH 8	16605
98	CH 9	16352	676	CH 9	16345
100	CH 10	16518	678	CH 10	16518
102	CH 11	17576	680	CH 11	17573
104	CH 12	17769	682	CH 12	17764
106	CH 13	17432	684	CH 13	17428
108	CH 14	19399	686	CH 14	19407
110	CH 15	16478	688	CH 15	16479
112	REFLECTOR 1 POSITION 4	3975	690	REFLECTOR 1 POSITION 21	3975
114	REFLECTOR 2 POSITION 4	3620	692	REFLECTOR 2 POSITION 21	3620
116	REFL 1 POS 4 2ND LOOK	3975	694	REFL 1 POS 21 2ND LOOK	3975
118	REFL 2 POS 4 2ND LOOK	3620	696	REFL 2 POS 21 2ND LOOK	3620
120	COLD CAL SAMPLE 4	15939	698	COLD CAL SAMPLE 21	15942
122	CH 3	16396	700	CH 3	16399
124	CH 4	15620	702	CH 4	15620
126	CH 5	17110	704	CH 5	17115
128	CH 6	15533	706	CH 6	15532
130	CH 7	16606	708	CH 7	16608
132	CH 8	16347	710	CH 8	16348
134	CH 9	16519	712	CH 9	16519
136	CH 10	17575	714	CH 10	17568
138	CH 11	17771	716	CH 11	17765
140	CH 12	17432	718	CH 12	17429
142	CH 13	19392	720	CH 13	19413
144	CH 14	16478	722	CH 14	16480
146	CH 15	3975	724	CH 15	3975
148	REFLECTOR 1 POSITION 5	3620	726	REFLECTOR 1 POSITION 22	3620
150	REFLECTOR 2 POSITION 5	3975	728	REFLECTOR 2 POSITION 22	3975
152	REFL 1 POS 5 2ND LOOK	3620	730	REFL 1 POS 22 2ND LOOK	3620
154	REFL 2 POS 5 2ND LOOK	15945	732	REFL 2 POS 22 2ND LOOK	15944
156	COLD CAL SAMPLE 5	16398	734	COLD CAL SAMPLE 22	16398
158	CH 3	15622	736	CH 3	15622
160	CH 4	17115	738	CH 4	17117
162	CH 5	15533	740	CH 5	15533
164	CH 6	16609	742	CH 6	16612
166	CH 7	16347	744	CH 7	16349
168	CH 8	16517	746	CH 8	16523
170	CH 9	17570	748	CH 9	17571
172	CH 10	17760	750	CH 10	17770
174	CH 11	17427	752	CH 11	17438
176	CH 12	19388	754	CH 12	19407
178	CH 13	16478	756	CH 13	16476
180	CH 14	3975	758	CH 14	3975
182	CH 15	3620	760	CH 15	3620
184	REFLECTOR 1 POSITION 6	3975	762	REFLECTOR 1 POSITION 23	3975
186	REFLECTOR 2 POSITION 6	3620	764	REFLECTOR 2 POSITION 23	3620
188	REFL 1 POS 6 2ND LOOK	15949	766	REFL 1 POS 23 2ND LOOK	15947
190	REFL 2 POS 6 2ND LOOK	16399	768	REFL 2 POS 23 2ND LOOK	16396
192	COLD CAL SAMPLE 6	15614	770	COLD CAL SAMPLE 23	15621

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17113	772	CH 6	17117
196	CH 7	15533	774	CH 7	15534
198	CH 8	16606	776	CH 8	16609
200	CH 9	16349	778	CH 9	16350
202	CH 10	16518	780	CH 10	16514
204	CH 11	17565	782	CH 11	17569
206	CH 12	17765	784	CH 12	17753
208	CH 13	17426	786	CH 13	17429
210	CH 14	19397	788	CH 14	19389
212	CH 15	16479	790	CH 15	16478
214	REFLECTOR 1 POSITION 7	3975	792	REFLECTOR 1 POSITION 24	3975
216	REFLECTOR 2 POSITION 7	3620	794	REFLECTOR 2 POSITION 24	3620
218	REFL 1 POS 7 2ND LOOK	3975	796	REFL 1 POS 24 2ND LOOK	3975
220	REFL 2 POS 7 2ND LOOK	3620	798	REFL 2 POS 24 2ND LOOK	3620
222	COLD CAL SAMPLE 7	15945	800	COLD CAL SAMPLE 24	15945
224	CH 3	16397	802	CH 3	16399
226	CH 4	15621	804	CH 4	15623
228	CH 5	17110	806	CH 5	17117
230	CH 6	15533	808	CH 6	15531
232	CH 7	16607	810	CH 7	16609
234	CH 8	16351	812	CH 8	16350
236	CH 9	16513	814	CH 9	16517
238	CH 10	17567	816	CH 10	17573
240	CH 11	17762	818	CH 11	17765
242	CH 12	17421	820	CH 12	17427
244	CH 13	19391	822	CH 13	19416
246	CH 14	16479	824	CH 14	16478
248	CH 15	3975	826	CH 15	3975
250	REFLECTOR 1 POSITION 8	3620	828	REFLECTOR 1 POSITION 25	3620
252	REFLECTOR 2 POSITION 8	3975	830	REFLECTOR 2 POSITION 25	3975
254	REFL 1 POS 8 2ND LOOK	3620	832	REFL 1 POS 25 2ND LOOK	3620
256	REFL 2 POS 8 2ND LOOK	15948	834	REFL 2 POS 25 2ND LOOK	15943
258	COLD CAL SAMPLE 8	16396	836	COLD CAL SAMPLE 25	16398
260	CH 3	15621	838	CH 3	15621
262	CH 4	17116	840	CH 4	17116
264	CH 5	15533	842	CH 5	15535
266	CH 6	16608	844	CH 6	16605
268	CH 7	16349	846	CH 7	16350
270	CH 8	16520	848	CH 8	16521
272	CH 9	17572	850	CH 9	17578
274	CH 10	17768	852	CH 10	17766
276	CH 11	17429	854	CH 11	17432
278	CH 12	19389	856	CH 12	19387
280	CH 13	16480	858	CH 13	16479
282	CH 14	3975	860	CH 14	3975
284	CH 15	3620	862	CH 15	3620
286	REFLECTOR 1 POSITION 9	3975	864	REFLECTOR 1 POSITION 26	3975
288	REFL 1 POS 9 2ND LOOK	3620	866	REFL 1 POS 26 2ND LOOK	3620
290	REFL 2 POS 9 2ND LOOK	15940	868	REFL 2 POS 26 2ND LOOK	15948
292	COLD CAL SAMPLE 9	16397	870	COLD CAL SAMPLE 26	16395



ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15619	872	CH 5	15617
296	CH 6	17115	874	CH 6	17116
298	CH 7	15532	876	CH 7	15530
300	CH 8	16607	878	CH 8	16611
302	CH 9	16349	880	CH 9	16353
304	CH 10	16517	882	CH 10	16516
306	CH 11	17574	884	CH 11	17574
308	CH 12	17763	886	CH 12	17763
310	CH 13	17428	888	CH 13	17431
312	CH 14	19416	890	CH 14	19387
314	CH 15	16478	892	CH 15	16480
316	REFLECTOR 1 POSITION 10	3975	894	REFLECTOR 1 POSITION 27	3975
318	REFLECTOR 2 POSITION 10	3620	896	REFLECTOR 2 POSITION 27	3620
320	REFL 1 POS 10 2ND LOOK	3975	898	REFL 1 POS 27 2ND LOOK	3975
322	REFL 2 POS 10 2ND LOOK	3620	900	REFL 2 POS 27 2ND LOOK	3620
324	COLD CAL SAMPLE 10 CH 3	15946	902	COLD CAL SAMPLE 27 CH 3	15946
326	CH 4	16397	904	CH 4	16394
328	CH 5	15620	906	CH 5	15616
330	CH 6	17117	908	CH 6	17117
332	CH 7	15531	910	CH 7	15534
334	CH 8	16605	912	CH 8	16604
336	CH 9	16348	914	CH 9	16353
338	CH 10	16518	916	CH 10	16518
340	CH 11	17569	918	CH 11	17576
342	CH 12	17767	920	CH 12	17767
344	CH 13	17422	922	CH 13	17415
346	CH 14	19371	924	CH 14	19417
348	CH 15	16479	926	CH 15	16479
350	REFLECTOR 1 POSITION 11	3975	928	REFLECTOR 1 POSITION 28	3975
352	REFLECTOR 2 POSITION 11	3620	930	REFLECTOR 2 POSITION 28	3620
354	REFL 1 POS 11 2ND LOOK	3975	932	REFL 1 POS 28 2ND LOOK	3975
356	REFL 2 POS 11 2ND LOOK	3620	934	REFL 2 POS 28 2ND LOOK	3620
358	COLD CAL SAMPLE 11 CH 3	15941	936	COLD CAL SAMPLE 28 CH 3	15943
360	CH 4	16399	938	CH 4	16398
362	CH 5	15621	940	CH 5	15618
364	CH 6	17117	942	CH 6	17119
366	CH 7	15532	944	CH 7	15534
368	CH 8	16607	946	CH 8	16607
370	CH 9	16347	948	CH 9	16351
372	CH 10	16520	950	CH 10	16514
374	CH 11	17573	952	CH 11	17564
376	CH 12	17762	954	CH 12	17769
378	CH 13	17437	956	CH 13	17419
380	CH 14	19399	958	CH 14	19382
382	CH 15	16478	960	CH 15	16479
384	REFLECTOR 1 POSITION 12	3975	962	REFLECTOR 1 POSITION 29	3975
386	REFLECTOR 2 POSITION 12	3620	964	REFLECTOR 2 POSITION 29	3620
388	REFL 1 POS 12 2ND LOOK	3975	966	REFL 1 POS 29 2ND LOOK	3975
390	REFL 2 POS 12 2ND LOOK	3620	968	REFL 2 POS 29 2ND LOOK	3620
392	COLD CAL SAMPLE 12 CH 3	15943	970	COLD CAL SAMPLE 29 CH 3	15943

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16401	972	CH 4	16400
396	CH 5	15620	974	CH 5	15617
398	CH 6	17119	976	CH 6	17116
400	CH 7	15533	978	CH 7	15534
402	CH 8	16606	980	CH 8	16609
404	CH 9	16351	982	CH 9	16351
406	CH 10	16514	984	CH 10	16521
408	CH 11	17569	986	CH 11	17576
410	CH 12	17766	988	CH 12	17771
412	CH 13	17415	990	CH 13	17428
414	CH 14	19391	992	CH 14	19400
416	CH 15	16481	994	CH 15	16479
418	REFLECTOR 1 POSITION 13	3975	996	REFLECTOR 1 POSITION 30	3975
420	REFLECTOR 2 POSITION 13	3620	998	REFLECTOR 2 POSITION 30	3620
422	REFL 1 POS 13 2ND LOOK	3975	1000	REFL 1 POS 30 2ND LOOK	3975
424	REFL 2 POS 13 2ND LOOK	3620	1002	REFL 2 POS 30 2ND LOOK	3620
426	COLD CAL SAMPLE 13	15941	1004	COLD CAL SAMPLE 30	15945
428	CH 3	16400	1006	CH 3	16398
430	CH 4	15619	1008	CH 4	15620
432	CH 5	17115	1010	CH 5	17118
434	CH 6	15536	1012	CH 6	15532
436	CH 7	16606	1014	CH 7	16611
438	CH 8	16350	1016	CH 8	16349
440	CH 9	16519	1018	CH 9	16517
442	CH 10	17564	1020	CH 10	17571
444	CH 11	17764	1022	CH 11	17755
446	CH 12	17428	1024	CH 12	17433
448	CH 13	19414	1026	CH 13	19381
450	CH 14	16479	1028	CH 14	16479
452	CH 15	3975	1030	CH 15	OE
454	REFLECTOR 1 POSITION 14	3620	1032	REFLECTOR 1 COLD CAL POS	OE
456	REFLECTOR 2 POSITION 14	3975	1034	REFLECTOR 2 COLD CAL POS	OE
458	REFL 1 POS 14 2ND LOOK	3620	1036	REFL 1 COLD CAL 2ND LOOK	OE
460	REFL 2 POS 14 2ND LOOK	15941	1038	REFL 2 COLD CAL 2ND LOOK	OE
462	COLD CAL SAMPLE 14	16397	1040	COLD CAL DATA 1	0
464	CH 3	15621	1042	CH 3	0
466	CH 4	17115	1044	CH 4	0
468	CH 5	15533	1046	CH 5	0
470	CH 6	16605	1048	CH 6	0
472	CH 7	16354	1050	CH 7	0
474	CH 8	16517	1052	CH 8	0
476	CH 9	17575	1054	CH 9	0
478	CH 10	17768	1056	CH 10	0
480	CH 11	17419	1058	CH 11	0
482	CH 12	19364	1060	CH 12	0
484	CH 13	16479	1062	CH 13	0
486	CH 14	3975	1064	CH 14	0
488	CH 15	3620	1066	CH 15	0
490	REFLECTOR 1 POSITION 15	3975	1068	REFLECTOR 1 COLD CAL DATA 2	0
492	REFLECTOR 2 POSITION 15	3620	1070	REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK			REFL 1 COLD CAL 2ND LOOK	0
	REFL 2 POS 15 2ND LOOK			REFL 2 COLD CAL 2ND LOOK	0
				COLD CAL DATA 1	0
				COLD CAL DATA 2	0

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	COLD CAL SAMPLE 15	CH 3	15942	1072	CH 7
496		CH 4	16397	1074	CH 8
498		CH 5	15617	1076	CH 9
500		CH 6	17117	1078	CH 10
502		CH 7	15533	1080	CH 11
504		CH 8	16609	1082	CH 12
506		CH 9	16351	1084	CH 13
508		CH 10	16514	1086	CH 14
510		CH 11	17570	1088	CH 15
512		CH 12	17767	1182	REFLECTOR 1 WARM CAL POS
514		CH 13	17434	1184	REFLECTOR 2 WARM CAL POS
516		CH 14	19382	1186	REFL 1 WARM CAL 2ND LOOK
518		CH 15	16480	1188	REFL 2 WARM CAL 2ND LOOK
520	REFLECTOR 1 POSITION 16	CH 3	3975	1190	WARM CAL DATA 1
522	REFLECTOR 2 POSITION 16	CH 4	3620	1192	
524	REFL 1 POS 16 2ND LOOK	CH 5	3975	1194	
526	REFL 2 POS 16 2ND LOOK	CH 6	3620	1196	
528	COLD CAL SAMPLE 16	CH 3	15948	1198	
530		CH 4	16399	1200	
532		CH 5	15620	1202	
534		CH 6	17114	1204	
536		CH 7	15532	1206	
538		CH 8	16607	1208	
540		CH 9	16350	1210	
542		CH 10	16521	1212	
544		CH 11	17572	1214	
546		CH 12	17761	1216	
548		CH 13	17427	1218	
550		CH 14	19402	1220	
552		CH 15	16479	1222	
554	REFLECTOR 1 POSITION 17	CH 3	3975	1224	
556	REFLECTOR 2 POSITION 17	CH 4	3620	1226	
558	REFL 1 POS 17 2ND LOOK	CH 5	3975	1228	
560	REFL 2 POS 17 2ND LOOK	CH 6	3620	1230	
562	COLD CAL SAMPLE 17	CH 3	15943	1232	
564		CH 4	16399	1234	
566		CH 5	15624	1236	
568		CH 6	17115	1238	
570		CH 7	15529	1240	
				WARM CAL DATA 2	

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	18059	23.04
1092	SCAN MOTOR A1-2	19488	25.06
1094	FEED HORN A1-1	20397	27.83
1096	FEED HORN A1-2	21667	30.31
1098	RF MUX A1-1	22586	31.88
1100	RF MUX A1-2	24002	34.75
1102	LOCAL OSCILLATOR CHANNEL 3	24917	36.74
1104	LOCAL OSCILLATOR CHANNEL 4	25338	36.88
1106	LOCAL OSCILLATOR CHANNEL 5	24180	35.28
1108	LOCAL OSCILLATOR CHANNEL 6	22821	31.71
1110	LOCAL OSCILLATOR CHANNEL 7	23318	33.40
1112	LOCAL OSCILLATOR CHANNEL 8	24715	36.15
1114	LOCAL OSCILLATOR CHANNEL 15	24405	35.11
1116	PLLO #2	22602	31.94
1118	PLLO #1	25541	37.69
1120	1553 INTERFACE	18543	37.10
1122	MIXER/IF AMPLIFIER CHANNEL 3	24310	35.31
1124	MIXER/IF AMPLIFIER CHANNEL 4	24472	35.11
1126	MIXER/IF AMPLIFIER CHANNEL 5	24075	34.75
1128	MIXER/IF AMPLIFIER CHANNEL 6	22889	32.47
1130	MIXER/IF AMPLIFIER CHANNEL 7	22918	33.08
1132	MIXER/IF AMPLIFIER CHANNEL 8	24393	35.32
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	22354	31.66
1136	MIXER/IF AMPLIFIER CHANNEL 15	24153	35.15
1138	IF AMPLIFIER CHANNEL 11 THRU 14	23916	34.49
1140	IF AMPLIFIER CHANNEL 9	24098	34.75
1142	IF AMPLIFIER CHANNEL 10	23947	34.72
1144	IF AMPLIFIER CHANNEL 11	23063	32.15
1146	DC/DC CONVERTER	25526	36.94
1148	IF AMPLIFIER CHANNEL 13	22647	31.46
1150	IF AMPLIFIER CHANNEL 14	23005	32.60
1152	IF AMPLIFIER CHANNEL 12	22812	32.02
1154	RF SHELF A1-1	23353	33.35
1156	RF SHELF A1-2	24079	34.13
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	20927	28.70
1160	A1-1 WARM LOAD 1	23603	24.20
1162	A1-1 WARM LOAD 2	24105	24.33
1164	A1-1 WARM LOAD 3	23602	24.35
1166	A1-1 WARM LOAD 4	23678	24.32
1168	A1-1 WARM LOAD CENTER	23873	24.33
1170	A1-2 WARM LOAD 1	25066	26.56
1172	A1-2 WARM LOAD 2	25124	26.58
1174	A1-2 WARM LOAD 3	25137	26.58
1176	A1-2 WARM LOAD 4	25123	26.45
1178	A1-2 WARM LOAD CENTER	25136	26.57
1180	TEMP SENSOR REFERENCE VOLTAGE	25270	

## DESCRIPTION

## STATUS

ANTENNA IN FULL SCAN MODE	NO
ANTENNA IN WARM CAL MODE	NO
ANTENNA IN COLD CAL MODE	YES
ANTENNA IN NADIR MODE	NO
COLD CAL. POSITION LSB	ZERO
COLD CAL. POSITION MSB	ONE
PLO REDUNDANCY	PLLO # 1
SCANNER A1-1 POWER	ON
SCANNER A1-2 POWER	ON
PLLO #1 LOCK	YES
PLLO #2 LOCK	OFF
ADC LATCHUP FLAG	ONE

## ENGINEERING DATA

DESCRIPTION	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	22.6
A1-1 RF SHELF TEMPERATURE #1	30.1
A1-1 WARM LOAD TEMPERATURE	23.7
A1-2 SCANNER MOTOR TEMPERATURE	25.4
A1-2 RF SHELF TEMPERATURE #1	34.6
A1-2 WARM LOAD TEMPERATURE	26.0
A1-1 RF SHELF TEMPERATURE #2	30.0
A1-2 RF SHELF TEMPERATURE #2	34.3

DESCRIPTION	VALUE	MA/VOLTS
SIGNAL PROCESSOR	22101	4.9
	21834	15.1
	21796	-15.0
SCAN DRIVE	22156	4.9
	22216	14.9
	21853	-15.1
PLO	22547	14.8
	22079	-15.2
RECEIVER	21815	7.9
MIXER/IF AMPLIFIER A1-1	21417	10.0
A1-2	21428	10.0
LO CHANNEL 6	21394	10.0
7	21445	10.0
SPARE	32767	327.5
LO CHANNEL 3	21250	10.1
4	21183	10.1
5	21376	10.0
8	21314	10.0
15	22016	15.0
QUIET BUS CURRENT	16421	2254.5
A1-1 NOISY POWER BUS CURRENT	62	0.4
A1-2 NOISY POWER BUS CURRENT	39	0.3

## PRT TEMPERATURES

## VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

## FIXED TARGET

## BASEPLATE

## THERMOCOUPLE TEMPERATURES

## FIXED TARGET SHROUD

## VARIABLE TARGET SHROUD

## FIXED TARGET N2

## VARIABLE TARGET N2

## HEATER N2

## FIXED TARGET FLOW METER

## VARIABLE TARGET FLOW METER

## BASEPLATE HEATER N2

## BASEPLATE N2

## BASEPLATE FLOW METER

## ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00

```

EOS A1-03 .EXE;41 COLD CAL MODE          P1 19-NOV-98 12:49:17      AN NUMBER 1501
[ 5 ] SCIENCE DATA ELEMENT 0000

[ 6 ] CONTROL/STATUS ELEMENT 00

[ 7 ] ENGINEERING ELEMENT 00

      COMMANDS
[ 9 ] SCANNER A1-1 POWER =      ON      PLO POWER =      PLO#1 [ 15 ]
[10 ] SCANNER A1-2 POWER =      ON      COLD CAL POSITION 1 = NO [ 16 ]
[11 ] ANTENNA FULL SCAN MODE = NO      2 = NO [ 17 ]
[12 ] WARM CAL = NO      3 = YES [ 18 ]
[13 ] COLD CAL = YES      COLD CAL POSITION 4 = NO [ 19 ]
[14 ] NADIR = NO      RESET C&DH PROCESSOR [ 20 ]
      GSE MODE [ 21 ]
ENGR OK POWER ON CHECKSUM IN C53D CALC C53D SA28 1501 SA29 2991
      SCREEN ONLY [ 2 ] PRINT [ 3 ] FULL [ 1 ] RETURN
SELECT BUTTON 3

```

Cold cal position 3  
 Data in support of 3.3.5.3.3 Step 18  
 EOS A1 S/N 202 S/O 560863 Op 0580  
 TAR 00434 Op 8030

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	COLD CAL SAMPLE 17	CH 8
2		00000011	574		CH 9
3	PACKET LENGTH	00000010	576		CH 10
4		10111111	578		CH 11
5	UNIT SERIAL NUMBER	00000011	580		CH 12
6		00000000	582		CH 13
7	INSTRUMENT MODE/STATUS	10011010	584		CH 14
8		01001000	586		CH 15
10	REFLECTOR 1 POSITION	3980	588	REFLECTOR 1 POSITION 18	3980
12	REFLECTOR 2 POSITION	3627	590	REFLECTOR 2 POSITION 18	3627
14	REFL 1 POS 1 2ND LOOK	3980	592	REFL 1 POS 18 2ND LOOK	3980
16	REFL 2 POS 1 2ND LOOK	3627	594	REFL 2 POS 18 2ND LOOK	3627
18	COLD CAL SAMPLE 1	15946	596	COLD CAL SAMPLE 18	15945
20		16404	598		16406
22		15631	600		15628
24		17120	602		17119
26		15542	604		15538
28		16603	606		16607
30		16356	608		16354
32		16527	610		16525
34		17590	612		17590
36		17790	614		17785
38		17440	616		17456
40		19433	618		19430
42		16485	620		16483
44	REFLECTOR 1 POSITION 2	3980	622	REFLECTOR 1 POSITION 19	3980
46	REFLECTOR 2 POSITION 2	3627	624	REFLECTOR 2 POSITION 19	3627
48	REFL 1 POS 2 2ND LOOK	3980	626	REFL 1 POS 19 2ND LOOK	3980
50	REFL 2 POS 2 2ND LOOK	3627	628	REFL 2 POS 19 2ND LOOK	3627
52	COLD CAL SAMPLE 2	15944	630	COLD CAL SAMPLE 19	15951
54		16405	632		16405
56		15630	634		15628
58		17122	636		17122
60		15540	638		15539
62		16604	640		16602
64		16356	642		16353
66		16527	644		16524
68		17586	646		17584
70		17790	648		17795
72		17453	650		17464
74		19415	652		19414
76		16484	654		16483
78	REFLECTOR 1 POSITION 3	3980	656	REFLECTOR 1 POSITION 20	3980
80	REFLECTOR 2 POSITION 3	3627	658	REFLECTOR 2 POSITION 20	3627
82	REFL 1 POS 3 2ND LOOK	3980	660	REFL 1 POS 20 2ND LOOK	3980
84	REFL 2 POS 3 2ND LOOK	3627	662	REFL 2 POS 20 2ND LOOK	3627
86	COLD CAL SAMPLE 3	15947	664	COLD CAL SAMPLE 20	15947
88		16401	666		16406
90		15631	668		15627
92		17123	670		17120



ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15538	672	CH 7	15538
96	CH 8	16603	674	CH 8	16600
98	CH 9	16354	676	CH 9	16355
100	CH 10	16525	678	CH 10	16528
102	CH 11	17589	680	CH 11	17588
104	CH 12	17786	682	CH 12	17785
106	CH 13	17455	684	CH 13	17440
108	CH 14	19423	686	CH 14	19410
110	CH 15	16486	688	CH 15	16484
112	REFLECTOR 1 POSITION 4	3980	690	REFLECTOR 1 POSITION 21	3980
114	REFLECTOR 2 POSITION 4	3627	692	REFLECTOR 2 POSITION 21	3627
116	REFL 1 POS 4 2ND LOOK	3980	694	REFL 1 POS 21 2ND LOOK	3980
118	REFL 2 POS 4 2ND LOOK	3627	696	REFL 2 POS 21 2ND LOOK	3627
120	COLD CAL SAMPLE 4	15943	698	COLD CAL SAMPLE 21	15946
122	CH 3	16403	700	CH 3	16402
124	CH 4	15631	702	CH 4	15631
126	CH 5	17126	704	CH 5	17117
128	CH 6	15537	706	CH 6	15537
130	CH 7	16599	708	CH 7	16604
132	CH 8	16354	710	CH 8	16356
134	CH 9	16528	712	CH 9	16523
136	CH 10	17590	714	CH 10	17592
138	CH 11	17788	716	CH 11	17790
140	CH 12	17447	718	CH 12	17441
142	CH 13	19414	720	CH 13	19412
144	CH 14	16484	722	CH 14	16485
146	CH 15	3980	724	CH 15	3980
148	REFLECTOR 1 POSITION 5	3627	726	REFLECTOR 1 POSITION 22	3627
150	REFLECTOR 2 POSITION 5	3980	728	REFLECTOR 2 POSITION 22	3980
152	REFL 1 POS 5 2ND LOOK	3627	730	REFL 1 POS 22 2ND LOOK	3627
154	REFL 2 POS 5 2ND LOOK	3627	732	REFL 2 POS 22 2ND LOOK	3627
156	COLD CAL SAMPLE 5	15945	734	COLD CAL SAMPLE 22	15943
158	CH 3	16404	736	CH 3	16402
160	CH 4	15627	738	CH 4	15630
162	CH 5	17124	740	CH 5	17118
164	CH 6	15539	742	CH 6	15537
166	CH 7	16604	744	CH 7	16604
168	CH 8	16521	746	CH 8	16352
170	CH 9	17595	748	CH 9	16527
172	CH 10	17791	750	CH 10	17586
174	CH 11	17447	752	CH 11	17790
176	CH 12	19448	754	CH 12	17456
178	CH 13	16483	756	CH 13	19430
180	CH 14	3980	758	CH 14	16486
182	CH 15	3627	760	REFLECTOR 1 POSITION 23	3980
184	REFLECTOR 1 POSITION 6	3980	762	REFLECTOR 2 POSITION 23	3627
186	REFL 1 POS 6 2ND LOOK	3980	764	REFL 1 POS 23 2ND LOOK	3980
188	REFL 2 POS 6 2ND LOOK	3627	766	REFL 2 POS 23 2ND LOOK	3627
190	COLD CAL SAMPLE 6	15950	768	COLD CAL SAMPLE 23	15946
192	CH 3	16404	770	CH 3	16406
	CH 4	15632		CH 4	15632
	CH 5			CH 5	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17122	772	CH 6	17122
196	CH 7	15535	774	CH 7	15539
198	CH 8	16602	776	CH 8	16600
200	CH 9	16353	778	CH 9	16355
202	CH 10	16525	780	CH 10	16527
204	CH 11	17587	782	CH 11	17592
206	CH 12	17782	784	CH 12	17791
208	CH 13	17438	786	CH 13	17448
210	CH 14	19420	788	CH 14	19433
212	CH 15	16484	790	CH 15	16485
214	REFLECTOR 1 POSITION 7	3980	792	REFLECTOR 1 POSITION 24	3980
216	REFLECTOR 2 POSITION 7	3627	794	REFLECTOR 2 POSITION 24	3627
218	REFL 1 POS 7 2ND LOOK	3980	796	REFL 1 POS 24 2ND LOOK	3980
220	REFL 2 POS 7 2ND LOOK	3627	798	REFL 2 POS 24 2ND LOOK	3627
222	COLD CAL SAMPLE 7	15950	800	COLD CAL SAMPLE 24	15945
224	CH 3	16405	802	CH 3	16404
226	CH 4	15626	804	CH 4	15632
228	CH 5	17121	806	CH 5	17120
230	CH 6	15538	808	CH 6	15537
232	CH 7	16602	810	CH 7	16604
234	CH 8	16355	812	CH 8	16356
236	CH 9	16525	814	CH 9	16526
238	CH 10	17594	816	CH 10	17585
240	CH 11	17786	818	CH 11	17791
242	CH 12	17451	820	CH 12	17446
244	CH 13	19454	822	CH 13	19401
246	CH 14	16484	824	CH 14	16485
248	CH 15	3980	826	CH 15	3980
250	REFLECTOR 1 POSITION 8	3627	828	REFLECTOR 1 POSITION 25	3627
252	REFLECTOR 2 POSITION 8	3980	830	REFLECTOR 2 POSITION 25	3980
254	REFL 1 POS 8 2ND LOOK	3627	832	REFL 1 POS 25 2ND LOOK	3627
256	REFL 2 POS 8 2ND LOOK	15945	834	REFL 2 POS 25 2ND LOOK	15944
258	COLD CAL SAMPLE 8	16406	836	COLD CAL SAMPLE 25	16403
260	CH 3	15628	838	CH 3	15631
262	CH 4	17125	840	CH 4	17117
264	CH 5	15539	842	CH 5	15540
266	CH 6	16606	844	CH 6	16602
268	CH 7	16352	846	CH 7	16355
270	CH 8	16524	848	CH 8	16526
272	CH 9	17592	850	CH 9	17592
274	CH 10	17789	852	CH 10	17787
276	CH 11	17444	854	CH 11	17437
278	CH 12	19407	856	CH 12	19427
280	CH 13	16486	858	CH 13	16486
282	CH 14	3980	860	CH 14	3980
284	CH 15	3627	862	CH 15	3627
286	REFLECTOR 1 POSITION 9	3980	864	REFLECTOR 1 POSITION 26	3980
288	REFLECTOR 2 POSITION 9	3627	866	REFLECTOR 2 POSITION 26	3627
290	REFL 1 POS 9 2ND LOOK	15948	868	REFL 1 POS 26 2ND LOOK	15951
292	REFL 2 POS 9 2ND LOOK	16405	870	REFL 2 POS 26 2ND LOOK	16404
	COLD CAL SAMPLE 9			COLD CAL SAMPLE 26	
	CH 3			CH 3	
	CH 4			CH 4	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15630	872	REFLECTOR 1 POSITION 27	3980
296	CH 6	17124	874	REFLECTOR 2 POSITION 27	3627
298	CH 7	15540	876	REFL 1 POS 27 2ND LOOK	3980
300	CH 8	16604	878	REFL 2 POS 27 2ND LOOK	3627
302	CH 9	16356	880	COLD CAL SAMPLE 27 CH 3	15948
304	CH 10	16526	882	CH 4	16403
306	CH 11	17587	884	CH 5	15630
308	CH 12	17787	886	CH 6	17116
310	CH 13	17467	888	CH 7	15539
312	CH 14	19429	890	CH 8	16601
314	CH 15	16483	892	CH 9	16355
316	REFLECTOR 1 POSITION 10	3980	894	CH 10	16521
318	REFLECTOR 2 POSITION 10	3627	896	CH 11	17587
320	REFL 1 POS 10 2ND LOOK	3980	898	CH 12	17795
322	REFL 2 POS 10 2ND LOOK	3627	900	CH 13	17438
324	COLD CAL SAMPLE 10 CH 3	15949	902	CH 14	19421
326	CH 4	16405	904	CH 15	16486
328	CH 5	15631	906	REFLECTOR 1 POSITION 28	3980
330	CH 6	17125	908	REFLECTOR 2 POSITION 28	3627
332	CH 7	15538	910	REFL 1 POS 28 2ND LOOK	3980
334	CH 8	16605	912	REFL 2 POS 28 2ND LOOK	3627
336	CH 9	16360	914	COLD CAL SAMPLE 28 CH 3	15946
338	CH 10	16530	916	CH 4	16405
340	CH 11	17592	918	CH 5	15631
342	CH 12	17788	920	CH 6	17118
344	CH 13	17446	922	CH 7	15538
346	CH 14	19439	924	CH 8	16599
348	CH 15	16487	926	CH 9	16353
350	REFLECTOR 1 POSITION 11	3980	928	CH 10	16526
352	REFLECTOR 2 POSITION 11	3627	930	CH 11	17589
354	REFL 1 POS 11 2ND LOOK	3980	932	CH 12	17778
356	REFL 2 POS 11 2ND LOOK	3627	934	CH 13	17447
358	COLD CAL SAMPLE 11 CH 3	15947	936	CH 14	19408
360	CH 4	16403	938	CH 15	16484
362	CH 5	15627	940	REFLECTOR 1 POSITION 29	3980
364	CH 6	17119	942	REFLECTOR 2 POSITION 29	3627
366	CH 7	15538	944	REFL 1 POS 29 2ND LOOK	3980
368	CH 8	16604	946	REFL 2 POS 29 2ND LOOK	3627
370	CH 9	16352	948	COLD CAL SAMPLE 29 CH 3	15945
372	CH 10	16522	950	CH 4	
374	CH 11	17590	952	CH 5	
376	CH 12	17782	954	CH 6	
378	CH 13	17466	956	CH 7	
380	CH 14	19425	958	CH 8	
382	CH 15	16483	960	CH 9	
384	REFLECTOR 1 POSITION 12	3980	962	CH 10	
386	REFLECTOR 2 POSITION 12	3627	964	CH 11	
388	REFL 1 POS 12 2ND LOOK	3980	966	CH 12	
390	REFL 2 POS 12 2ND LOOK	3627	968	CH 13	
392	COLD CAL SAMPLE 12 CH 3	15948	970	CH 14	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16406	972	CH 4	16404
396	CH 5	15629	974	CH 5	15633
398	CH 6	17118	976	CH 6	17119
400	CH 7	15537	978	CH 7	15536
402	CH 8	16601	980	CH 8	16601
404	CH 9	16356	982	CH 9	16355
406	CH 10	16528	984	CH 10	16522
408	CH 11	17593	986	CH 11	17589
410	CH 12	17801	988	CH 12	17791
412	CH 13	17453	990	CH 13	17450
414	CH 14	19408	992	CH 14	19429
416	CH 15	16485	994	CH 15	16485
418	REFLECTOR 1 POSITION 13	3980	996	REFLECTOR 1 POSITION 30	3980
420	REFLECTOR 2 POSITION 13	3627	998	REFLECTOR 2 POSITION 30	3627
422	REFL 1 POS 13 2ND LOOK	3980	1000	REFL 1 POS 30 2ND LOOK	3980
424	REFL 2 POS 13 2ND LOOK	3627	1002	REFL 2 POS 30 2ND LOOK	3627
426	COLD CAL SAMPLE 13	15943	1004	COLD CAL SAMPLE 30	15943
428	CH 3	16409	1006	CH 3	16409
430	CH 4	15629	1008	CH 4	15630
432	CH 5	17120	1010	CH 5	17121
434	CH 6	15540	1012	CH 6	15540
436	CH 7	16603	1014	CH 7	16599
438	CH 8	16354	1016	CH 8	16355
440	CH 9	16527	1018	CH 9	16523
442	CH 10	17587	1020	CH 10	17588
444	CH 11	17795	1022	CH 11	17787
446	CH 12	17443	1024	CH 12	17440
448	CH 13	19410	1026	CH 13	19409
450	CH 14	16485	1028	CH 14	16487
452	CH 15	3980	1030	CH 15	OE
454	REFLECTOR 1 POSITION 14	3627	1032	REFLECTOR 1 COLD CAL POS	OE
456	REFLECTOR 2 POSITION 14	3980	1034	REFLECTOR 2 COLD CAL POS	OE
458	REFL 1 POS 14 2ND LOOK	3627	1036	REFL 1 COLD CAL 2ND LOOK	OE
460	REFL 2 POS 14 2ND LOOK	15946	1038	REFL 2 COLD CAL 2ND LOOK	OE
462	COLD CAL SAMPLE 14	16406	1040	COLD CAL DATA 1	0
464	CH 3	15629	1042	CH 3	0
466	CH 4	17121	1044	CH 4	0
468	CH 5	15534	1046	CH 5	0
470	CH 6	16598	1048	CH 6	0
472	CH 7	16353	1050	CH 7	0
474	CH 8	16523	1052	CH 8	0
476	CH 9	17591	1054	CH 9	0
478	CH 10	17799	1056	CH 10	0
480	CH 11	17439	1058	CH 11	0
482	CH 12	19425	1060	CH 12	0
484	CH 13	16485	1062	CH 13	0
486	CH 14	3980	1064	CH 14	0
488	CH 15	3627	1066	CH 15	0
490	REFLECTOR 1 POSITION 15	3980	1068	REFLECTOR 1 COLD CAL DATA 2	0
492	REFLECTOR 2 POSITION 15	3627	1070	REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK			REFL 1 COLD CAL 2ND LOOK	0
	REFL 2 POS 15 2ND LOOK			REFL 2 COLD CAL 2ND LOOK	0
	COLD CAL SAMPLE 15			COLD CAL DATA 1	0
	CH 3			CH 3	0
	CH 4			CH 4	0
	CH 5			CH 5	0
	CH 6			CH 6	0
	CH 7			CH 7	0
	CH 8			CH 8	0
	CH 9			CH 9	0
	CH 10			CH 10	0
	CH 11			CH 11	0
	CH 12			CH 12	0
	CH 13			CH 13	0
	CH 14			CH 14	0
	CH 15			CH 15	0
	REFLECTOR 1 POSITION 15			REFLECTOR 1 COLD CAL DATA 2	0
	REFLECTOR 2 POSITION 15			REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK			REFL 1 COLD CAL 2ND LOOK	0
	REFL 2 POS 15 2ND LOOK			REFL 2 COLD CAL 2ND LOOK	0
	COLD CAL SAMPLE 15			COLD CAL DATA 1	0
	CH 3			CH 3	0
	CH 4			CH 4	0
	CH 5			CH 5	0
	CH 6			CH 6	0
	CH 7			CH 7	0
	CH 8			CH 8	0
	CH 9			CH 9	0
	CH 10			CH 10	0
	CH 11			CH 11	0
	CH 12			CH 12	0
	CH 13			CH 13	0
	CH 14			CH 14	0
	CH 15			CH 15	0
	REFLECTOR 1 POSITION 15			REFLECTOR 1 COLD CAL DATA 2	0
	REFLECTOR 2 POSITION 15			REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK			REFL 1 COLD CAL 2ND LOOK	0
	REFL 2 POS 15 2ND LOOK			REFL 2 COLD CAL 2ND LOOK	0
	COLD CAL SAMPLE 15			COLD CAL DATA 1	0
	CH 3			CH 3	0
	CH 4			CH 4	0
	CH 5			CH 5	0
	CH 6			CH 6	0
	CH 7			CH 7	0
	CH 8			CH 8	0
	CH 9			CH 9	0
	CH 10			CH 10	0
	CH 11			CH 11	0
	CH 12			CH 12	0
	CH 13			CH 13	0
	CH 14			CH 14	0
	CH 15			CH 15	0
	REFLECTOR 1 POSITION 15			REFLECTOR 1 COLD CAL DATA 2	0
	REFLECTOR 2 POSITION 15			REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK			REFL 1 COLD CAL 2ND LOOK	0
	REFL 2 POS 15 2ND LOOK			REFL 2 COLD CAL 2ND LOOK	0
	COLD CAL SAMPLE 15			COLD CAL DATA 1	0
	CH 3			CH 3	0
	CH 4			CH 4	0
	CH 5			CH 5	0
	CH 6			CH 6	0
	CH 7			CH 7	0
	CH 8			CH 8	0
	CH 9			CH 9	0
	CH 10			CH 10	0
	CH 11			CH 11	0
	CH 12			CH 12	0
	CH 13			CH 13	0
	CH 14			CH 14	0
	CH 15			CH 15	0
	REFLECTOR 1 POSITION 15			REFLECTOR 1 COLD CAL DATA 2	0
	REFLECTOR 2 POSITION 15			REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK			REFL 1 COLD CAL 2ND LOOK	0
	REFL 2 POS 15 2ND LOOK			REFL 2 COLD CAL 2ND LOOK	0
	COLD CAL SAMPLE 15			COLD CAL DATA 1	0
	CH 3			CH 3	0
	CH 4			CH 4	0
	CH 5			CH 5	0
	CH 6			CH 6	0
	CH 7			CH 7	0
	CH 8			CH 8	0
	CH 9			CH 9	0
	CH 10			CH 10	0
	CH 11			CH 11	0
	CH 12			CH 12	0
	CH 13			CH 13	0
	CH 14			CH 14	0
	CH 15			CH 15	0
	REFLECTOR 1 POSITION 15			REFLECTOR 1 COLD CAL DATA 2	0
	REFLECTOR 2 POSITION 15			REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK			REFL 1 COLD CAL 2ND LOOK	0
	REFL 2 POS 15 2ND LOOK			REFL 2 COLD CAL 2ND LOOK	0
	COLD CAL SAMPLE 15			COLD CAL DATA 1	0
	CH 3			CH 3	0
	CH 4			CH 4	0
	CH 5			CH 5	0
	CH 6			CH 6	0
	CH 7			CH 7	0
	CH 8			CH 8	0
	CH 9			CH 9	0
	CH 10			CH 10	0
	CH 11			CH 11	0
	CH 12			CH 12	0
	CH 13			CH 13	0
	CH 14			CH 14	0
	CH 15			CH 15	0
	REFLECTOR 1 POSITION 15			REFLECTOR 1 COLD CAL DATA 2	0
	REFLECTOR 2 POSITION 15			REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK			REFL 1 COLD CAL 2ND LOOK	0
	REFL 2 POS 15 2ND LOOK			REFL 2 COLD CAL 2ND LOOK	0
	COLD CAL SAMPLE 15			COLD CAL DATA 1	0
	CH 3			CH 3	0
	CH 4			CH 4	0
	CH 5			CH 5	0
	CH 6			CH 6	0
	CH 7			CH 7	0
	CH 8			CH 8	0
	CH 9			CH 9	0
	CH 10			CH 10	0
	CH 11			CH 11	0
	CH 12			CH 12	0
	CH 13			CH 13	0
	CH 14			CH 14	0
	CH 15			CH 15	0
	REFLECTOR 1 POSITION 15			REFLECTOR 1 COLD CAL DATA 2	0
	REFLECTOR 2 POSITION 15			REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK			REFL 1 COLD CAL 2ND LOOK	0
	REFL 2 POS 15 2ND LOOK			REFL 2 COLD CAL 2ND LOOK	0
	COLD CAL SAMPLE 15			COLD CAL DATA 1	0
	CH 3			CH 3	0
	CH 4			CH 4	0
	CH 5			CH 5	0
	CH 6			CH 6	0
	CH 7			CH 7	0
	CH 8			CH 8	0
	CH 9			CH 9	0
	CH 10			CH 10	0
	CH 11			CH 11	0
	CH 12			CH 12	0
	CH 13			CH 13	0
	CH 14			CH 14	0
	CH 15			CH 15	0
	REFLECTOR 1 POSITION 15			REFLECTOR 1 COLD CAL DATA 2	0
	REFLECTOR 2 POSITION 15			REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK			REFL 1 COLD CAL 2ND LOOK	0
	REFL 2 POS 15 2ND LOOK			REFL 2 COLD CAL 2ND LOOK	0
	COLD CAL SAMPLE 15			COLD CAL DATA 1	0
	CH 3			CH 3	0
	CH 4			CH 4	0
	CH 5			CH 5	0
	CH 6			CH 6	0
	CH 7			CH 7	0
	CH 8			CH 8	0
	CH 9			CH 9	0
	CH 10			CH 10	0
	CH 11			CH 11	0
	CH 12			CH 12	0
	CH 13			CH 13	0
	CH 14			CH 14	0
	CH 15			CH 15	0
	REFLECTOR 1 POSITION 15			REFLECTOR 1 COLD CAL DATA 2	0
	REFLECTOR 2 POSITION 15			REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK			REFL 1 COLD CAL 2ND LOOK	0
	REFL 2 POS 15 2ND LOOK			REFL 2 COLD CAL 2ND LOOK	0
	COLD CAL SAMPLE 15			COLD CAL DATA 1	0
	CH 3			CH 3	0
	CH 4			CH 4	0
	CH 5			CH 5	0
	CH 6			CH 6	0
	CH 7			CH 7	0
	CH 8			CH 8	0
	CH 9			CH 9	0
	CH 10			CH 10	0
	CH 11			CH 11	0
	CH 12			CH 12	0
	CH 13			CH 13	0
	CH 14			CH 14	0
	CH 15			CH 15	0
	REFLECTOR 1 POSITION 15			REFLECTOR 1 COLD CAL DATA 2	0
	REFLECTOR 2 POSITION 15			REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK			REFL 1 COLD CAL 2ND LOOK	0
	REFL 2 POS 15 2ND LOOK			REFL 2 COLD CAL 2ND LOOK	0
	COLD CAL SAMPLE 15			COLD CAL DATA 1	0
	CH 3			CH 3	0
	CH 4			CH 4	0
	CH 5			CH 5	0
	CH 6			CH 6	0
	CH 7			CH 7	0
	CH 8			CH 8	0
	CH 9			CH 9	0
	CH 10			CH 10	0
	CH 11			CH 11	0
	CH 12			CH 12	0
	CH 13			CH 13	0
	CH 14			CH 14	0
	CH 15			CH 15	0
	REFLECTOR 1 POSITION 15			REFLECTOR 1 COLD CAL DATA 2	0
	REFLECTOR 2 POSITION 15			REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK			REFL 1 COLD CAL 2ND LOOK	0
	REFL 2 POS 15 2ND LOOK			REFL 2 COLD CAL 2ND LOOK	0
	COLD CAL SAMPLE 15			COLD CAL DATA 1	0
	CH 3			CH 3	0
	CH 4			CH 4	0
	CH 5			CH 5	0
	CH 6			CH 6	0
	CH 7			CH 7	0
	CH 8			CH 8	0
	CH 9			CH 9	0
	CH 10			CH 10	0
	CH 11			CH 11	0
	CH 12			CH 12	0
	CH 13			CH 13	0
	CH 14			CH 14	0
	CH 15			CH 15	0
	REFLECTOR 1 POSITION 15			REFLECTOR 1 COLD CAL DATA 2	0
	REFLECTOR 2 POSITION 15			REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK			REFL 1 COLD CAL 2ND LOOK	0
	REFL 2 POS 15 2ND LOOK			REFL 2 COLD CAL 2ND LOOK	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	COLD CAL SAMPLE 15	CH 3	15951	1072	CH 7
496		CH 4	16407	1074	CH 8
498		CH 5	15629	1076	CH 9
500		CH 6	17118	1078	CH 10
502		CH 7	15538	1080	CH 11
504		CH 8	16601	1082	CH 12
506		CH 9	16356	1084	CH 13
508		CH 10	16523	1086	CH 14
510		CH 11	17593	1088	CH 15
512		CH 12	17798	1182	REFLECTOR 1 WARM CAL POS
514		CH 13	17451	1184	REFLECTOR 2 WARM CAL POS
516		CH 14	19401	1186	REFL 1 WARM CAL 2ND LOOK
518		CH 15	16484	1188	REFL 2 WARM CAL 2ND LOOK
520	REFLECTOR 1 POSITION 16	CH 16	3980	1190	WARM CAL DATA 1
522	REFLECTOR 2 POSITION 16	CH 16	3627	1192	CH 3
524	REFL 1 POS 16 2ND LOOK	CH 16	3980	1194	CH 4
526	REFL 2 POS 16 2ND LOOK	CH 16	3627	1196	CH 5
528	COLD CAL SAMPLE 16	CH 3	15946	1198	CH 6
530		CH 4	16407	1200	CH 7
532		CH 5	15629	1202	CH 8
534		CH 6	17122	1204	CH 9
536		CH 7	15538	1206	CH 10
538		CH 8	16601	1208	CH 11
540		CH 9	16356	1210	CH 12
542		CH 10	16524	1212	CH 13
544		CH 11	17593	1214	CH 14
546		CH 12	17791	1216	CH 15
548		CH 13	17445	1218	CH 3
550		CH 14	19417	1220	CH 4
552		CH 15	16485	1222	CH 5
554	REFLECTOR 1 POSITION 17	CH 17	3980	1224	CH 6
556	REFLECTOR 2 POSITION 17	CH 17	3627	1226	CH 7
558	REFL 1 POS 17 2ND LOOK	CH 17	3980	1228	CH 8
560	REFL 2 POS 17 2ND LOOK	CH 17	3627	1230	CH 9
562	COLD CAL SAMPLE 17	CH 3	15949	1232	CH 10
564		CH 4	16404	1234	CH 11
566		CH 5	15628	1236	CH 12
568		CH 6	17119	1238	CH 13
570		CH 7	15538	1240	CH 14

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE	DEG C
1090	SCAN MOTOR A1-1	18024	22.98	
1092	SCAN MOTOR A1-2	19445	24.97	
1094	FEED HORN A1-1	20341	27.73	
1096	FEED HORN A1-2	21617	30.21	
1098	RF MUX A1-1	22517	31.75	
1100	RF MUX A1-2	23936	34.63	
1102	LOCAL OSCILLATOR CHANNEL 3	24853	36.62	
1104	LOCAL OSCILLATOR CHANNEL 4	25269	36.75	
1106	LOCAL OSCILLATOR CHANNEL 5	24120	35.16	
1108	LOCAL OSCILLATOR CHANNEL 6	22758	31.59	
1110	LOCAL OSCILLATOR CHANNEL 7	23247	33.26	
1112	LOCAL OSCILLATOR CHANNEL 8	24649	36.02	
1114	LOCAL OSCILLATOR CHANNEL 15	24336	34.98	
1116	PLLO #2	22534	31.81	
1118	PLLO #1	25474	37.56	
1120	1553 INTERFACE	18477	36.97	
1122	MIXER/IF AMPLIFIER CHANNEL 3	24241	35.18	
1124	MIXER/IF AMPLIFIER CHANNEL 4	24405	34.98	
1126	MIXER/IF AMPLIFIER CHANNEL 5	24010	34.62	
1128	MIXER/IF AMPLIFIER CHANNEL 6	22820	32.33	
1130	MIXER/IF AMPLIFIER CHANNEL 7	22847	32.94	
1132	MIXER/IF AMPLIFIER CHANNEL 8	24326	35.19	
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	22284	31.53	
1136	MIXER/IF AMPLIFIER CHANNEL 15	24084	35.01	
1138	IF AMPLIFIER CHANNEL 11 THRU 14	23850	34.36	
1140	IF AMPLIFIER CHANNEL 9	24030	34.61	
1142	IF AMPLIFIER CHANNEL 10	23882	34.59	
1144	IF AMPLIFIER CHANNEL 11	22994	32.02	
1146	DC/DC CONVERTER	25474	36.84	
1148	IF AMPLIFIER CHANNEL 13	22575	31.32	
1150	IF AMPLIFIER CHANNEL 14	22933	32.46	
1152	IF AMPLIFIER CHANNEL 12	22741	31.88	
1154	RF SHELF A1-1	23288	33.22	
1156	RF SHELF A1-2	24016	34.01	
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	20865	28.58	
1160	A1-1 WARM LOAD 1	23553	24.11	
1162	A1-1 WARM LOAD 2	24050	24.22	
1164	A1-1 WARM LOAD 3	23547	24.24	
1166	A1-1 WARM LOAD 4	23624	24.21	
1168	A1-1 WARM LOAD CENTER	23825	24.23	
1170	A1-2 WARM LOAD 1	25005	26.44	
1172	A1-2 WARM LOAD 2	25062	26.46	
1174	A1-2 WARM LOAD 3	25076	26.46	
1176	A1-2 WARM LOAD 4	25065	26.34	
1178	A1-2 WARM LOAD CENTER	25073	26.44	
1180	TEMP SENSOR REFERENCE VOLTAGE	25271		

## DESCRIPTION

## STATUS

ANTENNA IN FULL SCAN MODE	NO
ANTENNA IN WARM CAL MODE	NO
ANTENNA IN COLD CAL MODE	YES
ANTENNA IN NADIR MODE	NO
COLD CAL. POSITION LSB	ZERO
COLD CAL. POSITION MSB	ONE
PLO REDUNDANCY	PLLO # 1
SCANNER A1-1 POWER	ON
SCANNER A1-2 POWER	ON
PLLO #1 LOCK	YES
PLLO #2 LOCK	OFF
ADC LATCHUP FLAG	ONE

## ENGINEERING DATA

## DESCRIPTION

## DEG C

A1-1 SCANNER MOTOR TEMPERATURE	22.5
A1-1 RF SHELF TEMPERATURE #1	29.8
A1-1 WARM LOAD TEMPERATURE	23.4
A1-2 SCANNER MOTOR TEMPERATURE	25.2
A1-2 RF SHELF TEMPERATURE #1	34.3
A1-2 WARM LOAD TEMPERATURE	25.7
A1-1 RF SHELF TEMPERATURE #2	29.6
A1-2 RF SHELF TEMPERATURE #2	33.9

## VALUE

## MA/VOLTS

SIGNAL PROCESSOR	+5 VDC	22091	4.9
	+15 VDC	21833	15.1
	-15 VDC	21797	-15.0
SCAN DRIVE	+5 VDC	22149	4.9
	+15 VDC	22152	14.9
	-15 VDC	21839	-15.1
PLO	+15 VDC	22548	14.8
	-15 VDC	22079	-15.2
RECEIVER	+8 VDC	21815	7.9
MIXER/IF AMPLIFIER A1-1	+10 VDC	21417	10.0
A1-2	+10 VDC	21428	10.0
LO CHANNEL 6	+10 VDC	21394	10.0
7	+10 VDC	21449	10.0
SPARE		32767	327.7
LO CHANNEL 3	+10 VDC	21257	10.1
4	+10 VDC	21179	10.1
5	+10 VDC	21378	10.0
8	+10 VDC	21311	10.0
15	+15 VDC	22015	15.0
QUIET BUS CURRENT		16311	2240.1
A1-1 NOISY POWER BUS CURRENT		62	0.2
A1-2 NOISY POWER BUS CURRENT		39	0.1

## PRT TEMPERATURES

## VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

## FIXED TARGET

## BASEPLATE

## THERMOCOUPLE TEMPERATURES

## FIXED TARGET SHROUD

## VARIABLE TARGET SHROUD

## FIXED TARGET N2

## VARIABLE TARGET N2

## HEATER N2

FIXED TARGET FLOW METER  
VARIABLE TARGET FLOW METER  
BASEPLATE HEATER N2  
BASEPLATE N2  
BASEPLATE FLOW METER  
ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00



EOS	A1-03	EXE;41	COLD CAL. MODE	P1	19-NOV-98	13:13:18	LN NUMBER	1681
[ 5 ]	SCIENCE	DATA	ELEMENT 0000					
[ 6 ]	CONTROL/STATUS	ELEMENT	00					
[ 7 ]	ENGINEERING	ELEMENT	00					
		COMMANDS						
[ 9 ]	SCANNER A1-1	POWER =	ON				PLLO#1 [ 15 ]	
				COLD CAL POSITION 1 =				NO [ 16 ]
[ 10 ]	SCANNER A1-2	POWER =	ON					NO [ 17 ]
					2 =			
[ 11 ]	ANTENNA FULL SCAN	MODE =	NO					NO [ 18 ]
					3 =			
[ 12 ]	WARM CAL	=	NO					YES [ 19 ]
				COLD CAL POSITION 4 =				
[ 13 ]	COLD CAL	=	YES					[ 20 ]
				RESET C&DH PROCESSOR				
[ 14 ]	NADIR	=	NO					[ 21 ]
				GSE MODE				
ENGR OK	POWER	ON	CHECKSUM IN 8AEB CALC 8AEB	SA28	1681	SA29	3351	
		SCREEN ONLY [ 2 ]	PRINT [ 3 ] FULL			[ 1 ]	RETURN	
		SELECT BUTTON 3						

Cold Cal Position 4  
 Data in support 3.353.3 Step 26  
 EOS A1 S/N 202 S/056863 Op 0580  
 TAR 00134 Op 8030

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	COLD CAL SAMPLE 17	16601
2		00000011	574	CH 8	16343
3	PACKET LENGTH	00000010	576	CH 9	16507
4		10111111	578	CH 10	17543
5	UNIT SERIAL NUMBER	00000011	580	CH 11	17742
6		00000000	582	CH 12	17406
7	INSTRUMENT MODE/STATUS	10011010	584	CH 13	19369
8		01101000	586	CH 14	16469
10	REFLECTOR 1 POSITION 1	3827	588	CH 15	3827
12	REFLECTOR 2 POSITION 1	3475	590	REFLECTOR 1 POSITION 18	3476
14	REFL 1 POS 1 2ND LOOK	3827	592	REFLECTOR 2 POSITION 18	3827
16	REFL 2 POS 1 2ND LOOK	3475	594	REFL 1 POS 18 2ND LOOK	3476
18	COLD CAL SAMPLE 1	15946	596	REFL 2 POS 18 2ND LOOK	15940
20	CH 3	16388	598	COLD CAL SAMPLE 18	16391
22	CH 4	15611	600	CH 3	15605
24	CH 5	17104	602	CH 4	17104
26	CH 6	15527	604	CH 5	15522
28	CH 7	16602	606	CH 6	16602
30	CH 8	16343	608	CH 7	16342
32	CH 9	16512	610	CH 8	16507
34	CH 10	17556	612	CH 9	17548
36	CH 11	17727	614	CH 10	17731
38	CH 12	17403	616	CH 11	17398
40	CH 13	19356	618	CH 12	19351
42	CH 14	16469	620	CH 13	16469
44	CH 15	3827	622	CH 14	3827
46	REFLECTOR 1 POSITION 2	3476	624	CH 15	3476
48	REFLECTOR 2 POSITION 2	3827	626	REFLECTOR 1 POSITION 19	3827
50	REFL 1 POS 2 2ND LOOK	3476	628	REFLECTOR 2 POSITION 19	3476
52	REFL 2 POS 2 2ND LOOK	15944	630	REFL 1 POS 19 2ND LOOK	15943
54	COLD CAL SAMPLE 2	16391	632	REFL 2 POS 19 2ND LOOK	16389
56	CH 3	15611	634	COLD CAL SAMPLE 19	15608
58	CH 4	17106	636	CH 3	17103
60	CH 5	15528	638	CH 4	15529
62	CH 6	16601	640	CH 5	16600
64	CH 7	16342	642	CH 6	16343
66	CH 8	16510	644	CH 7	16504
68	CH 9	17554	646	CH 8	17547
70	CH 10	17737	648	CH 9	17733
72	CH 11	17401	650	CH 10	17403
74	CH 12	19355	652	CH 11	19352
76	CH 13	16468	654	CH 12	16470
78	CH 14	3827	656	CH 13	3827
80	CH 15	3476	658	REFLECTOR 1 POSITION 20	3476
82	REFLECTOR 1 POSITION 3	3827	660	REFLECTOR 2 POSITION 20	3827
84	REFL 1 POS 3 2ND LOOK	3476	662	REFL 1 POS 20 2ND LOOK	3476
86	REFL 2 POS 3 2ND LOOK	15943	664	REFL 2 POS 20 2ND LOOK	15945
88	COLD CAL SAMPLE 3	16389	666	COLD CAL SAMPLE 20	16390
90	CH 3	15609	668	CH 3	15606
92	CH 4	17100	670	CH 4	17104
	CH 5			CH 5	
	CH 6			CH 6	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15525	672	REFLECTOR 1 POSITION 21	3827
96	CH 8	16602	674	REFLECTOR 2 POSITION 21	3476
98	CH 9	16341	676	REFL 1 POS 21 2ND LOOK	3827
100	CH 10	16504	678	REFL 2 POS 21 2ND LOOK	3476
102	CH 11	17547	680	COLD CAL SAMPLE 21	15939
104	CH 12	17724	682	CH 4	16395
106	CH 13	17399	684	CH 5	15604
108	CH 14	19365	686	CH 6	17103
110	CH 15	16469	688	CH 7	15525
112	REFLECTOR 1 POSITION 4	3827	690	CH 8	16600
114	REFLECTOR 2 POSITION 4	3476	692	CH 9	16505
116	REFL 1 POS 4 2ND LOOK	3827	694	CH 10	17549
118	REFL 2 POS 4 2ND LOOK	3476	696	CH 11	17734
120	COLD CAL SAMPLE 4	15939	698	CH 12	17398
122	CH 3	16392	700	CH 13	19361
124	CH 4	15608	702	CH 14	16468
126	CH 5	17107	704	CH 15	3827
128	CH 6	15526	706	REFLECTOR 1 POSITION 22	3476
130	CH 7	16600	708	REFLECTOR 2 POSITION 22	3827
132	CH 8	16342	710	REFL 1 POS 22 2ND LOOK	3827
134	CH 9	16508	712	REFL 2 POS 22 2ND LOOK	3476
136	CH 10	17549	714	COLD CAL SAMPLE 22	15941
138	CH 11	17735	716	CH 4	16390
140	CH 12	17404	718	CH 5	15605
142	CH 13	19358	720	CH 6	17105
144	CH 14	16470	722	CH 7	15527
146	REFLECTOR 1 POSITION 5	3827	724	CH 8	16604
148	REFLECTOR 2 POSITION 5	3476	726	CH 9	16338
150	REFL 1 POS 5 2ND LOOK	3827	728	CH 10	16508
152	REFL 2 POS 5 2ND LOOK	3476	730	CH 11	17549
154	COLD CAL SAMPLE 5	15946	732	CH 12	17733
156	CH 3	16390	734	CH 13	17408
158	CH 4	15605	736	CH 14	19364
160	CH 5	17107	738	CH 15	16469
162	CH 6	15525	740	REFLECTOR 1 POSITION 23	3827
164	CH 7	16601	742	REFLECTOR 2 POSITION 23	3476
166	CH 8	16342	744	REFL 1 POS 23 2ND LOOK	3827
168	CH 9	16506	746	REFL 2 POS 23 2ND LOOK	3476
170	CH 10	17544	748	COLD CAL SAMPLE 23	15937
172	CH 11	17731	750	CH 3	16387
174	CH 12	17411	752	CH 4	15608
176	CH 13	19372	754	CH 5	
178	CH 14	16468	756		
180	REFLECTOR 1 POSITION 6	3827	758		
182	REFLECTOR 2 POSITION 6	3476	760		
184	REFL 1 POS 6 2ND LOOK	3827	762		
186	REFL 2 POS 6 2ND LOOK	3476	764		
188	COLD CAL SAMPLE 6	15944	766		
190	CH 3	16392	768		
192	CH 4	15606	770		

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17103	772	CH 6	17105
196	CH 7	15525	774	CH 7	15528
198	CH 8	16601	776	CH 8	16604
200	CH 9	16344	778	CH 9	16346
202	CH 10	16510	780	CH 10	16502
204	CH 11	17545	782	CH 11	17550
206	CH 12	17730	784	CH 12	17729
208	CH 13	17407	786	CH 13	17398
210	CH 14	19370	788	CH 14	19370
212	CH 15	16470	790	CH 15	16469
214	REFLECTOR 1 POSITION 7	3827	792	REFLECTOR 1 POSITION 24	3827
216	REFLECTOR 2 POSITION 7	3476	794	REFLECTOR 2 POSITION 24	3476
218	REFL 1 POS 7 2ND LOOK	3827	796	REFL 1 POS 24 2ND LOOK	3827
220	REFL 2 POS 7 2ND LOOK	3476	798	REFL 2 POS 24 2ND LOOK	3476
222	COLD CAL SAMPLE 7	15948	800	COLD CAL SAMPLE 24	15937
224	CH 3	16392	802	CH 3	16391
226	CH 4	15603	804	CH 4	15608
228	CH 5	17102	806	CH 5	17109
230	CH 6	15523	808	CH 6	15525
232	CH 7	16601	810	CH 7	16599
234	CH 8	16341	812	CH 8	16343
236	CH 9	16510	814	CH 9	16505
238	CH 10	17725	816	CH 10	17551
240	CH 11	17403	818	CH 11	17731
242	CH 12	19372	820	CH 12	17408
244	CH 13	16472	822	CH 13	19364
246	CH 14	3827	824	CH 14	16468
248	CH 15	3476	826	CH 15	3827
250	REFLECTOR 1 POSITION 8	3827	828	REFLECTOR 1 POSITION 25	3827
252	REFLECTOR 2 POSITION 8	3827	830	REFLECTOR 2 POSITION 25	3476
254	REFL 1 POS 8 2ND LOOK	3476	832	REFL 1 POS 25 2ND LOOK	3827
256	REFL 2 POS 8 2ND LOOK	15944	834	REFL 2 POS 25 2ND LOOK	3475
258	COLD CAL SAMPLE 8	15944	836	COLD CAL SAMPLE 25	15938
260	CH 3	16390	838	CH 3	16388
262	CH 4	15608	840	CH 4	15606
264	CH 5	17105	842	CH 5	17103
266	CH 6	15523	844	CH 6	15525
268	CH 7	16601	846	CH 7	16604
270	CH 8	16347	848	CH 8	16339
272	CH 9	16503	850	CH 9	16505
274	CH 10	17548	852	CH 10	17551
276	CH 11	17736	854	CH 11	17735
278	CH 12	17401	856	CH 12	17393
280	CH 13	19356	858	CH 13	19344
282	CH 14	16467	860	CH 14	16469
284	CH 15	3827	862	CH 15	3827
286	REFLECTOR 1 POSITION 9	3476	864	REFLECTOR 1 POSITION 26	3476
288	REFLECTOR 2 POSITION 9	3827	866	REFLECTOR 2 POSITION 26	3827
290	REFL 1 POS 9 2ND LOOK	3476	868	REFL 1 POS 26 2ND LOOK	3476
292	REFL 2 POS 9 2ND LOOK	15941	870	REFL 2 POS 26 2ND LOOK	15940
	COLD CAL SAMPLE 9	16389		COLD CAL SAMPLE 26	16388

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15604	872	CH 5	15603
296	CH 6	17104	874	CH 6	17103
298	CH 7	15523	876	CH 7	15524
300	CH 8	16597	878	CH 8	16600
302	CH 9	16344	880	CH 9	16344
304	CH 10	16510	882	CH 10	16511
306	CH 11	17554	884	CH 11	17551
308	CH 12	17732	886	CH 12	17731
310	CH 13	17389	888	CH 13	17405
312	CH 14	19358	890	CH 14	19339
314	CH 15	16468	892	CH 15	16469
316	REFLECTOR 1 POSITION 10	3827	894	REFLECTOR 1 POSITION 27	3827
318	REFLECTOR 2 POSITION 10	3476	896	REFLECTOR 2 POSITION 27	3476
320	REFL 1 POS 10 2ND LOOK	3827	898	REFL 1 POS 27 2ND LOOK	3827
322	REFL 2 POS 10 2ND LOOK	3476	900	REFL 2 POS 27 2ND LOOK	3476
324	COLD CAL SAMPLE 10	15945	902	COLD CAL SAMPLE 27	15940
326	CH 3	16390	904	CH 3	16392
328	CH 4	15607	906	CH 4	15609
330	CH 5	17106	908	CH 5	17106
332	CH 6	15526	910	CH 6	15526
334	CH 7	16602	912	CH 7	16602
336	CH 8	16346	914	CH 8	16341
338	CH 9	16504	916	CH 9	16509
340	CH 10	17553	918	CH 10	17547
342	CH 11	17723	920	CH 11	17738
344	CH 12	17416	922	CH 12	17402
346	CH 13	19355	924	CH 13	19370
348	CH 14	16469	926	CH 14	16469
350	CH 15	3827	928	CH 15	3827
352	REFLECTOR 1 POSITION 11	3476	930	REFLECTOR 1 POSITION 28	3476
354	REFLECTOR 2 POSITION 11	3827	932	REFLECTOR 2 POSITION 28	3827
356	REFL 1 POS 11 2ND LOOK	3476	934	REFL 1 POS 28 2ND LOOK	3476
358	REFL 2 POS 11 2ND LOOK	15942	936	REFL 2 POS 28 2ND LOOK	15942
360	COLD CAL SAMPLE 11	16389	938	COLD CAL SAMPLE 28	16386
362	CH 3	15603	940	CH 3	15610
364	CH 4	17104	942	CH 4	17106
366	CH 5	15524	944	CH 5	15529
368	CH 6	16598	946	CH 6	16597
370	CH 7	16341	948	CH 7	16343
372	CH 8	16510	950	CH 8	16509
374	CH 9	17552	952	CH 9	17547
376	CH 10	17732	954	CH 10	17731
378	CH 11	17405	956	CH 11	17400
380	CH 12	19371	958	CH 12	19371
382	CH 13	16469	960	CH 13	16469
384	CH 14	3827	962	CH 14	3827
386	CH 15	3476	964	CH 15	3476
388	REFLECTOR 1 POSITION 12	3827	966	REFLECTOR 1 POSITION 29	3827
390	REFLECTOR 2 POSITION 12	3476	968	REFLECTOR 2 POSITION 29	3476
392	REFL 1 POS 12 2ND LOOK	15941	970	REFL 1 POS 29 2ND LOOK	15941
	REFL 2 POS 12 2ND LOOK			REFL 2 POS 29 2ND LOOK	
	COLD CAL SAMPLE 12			COLD CAL SAMPLE 29	
	CH 3			CH 3	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16388	972	CH 4	16392
396	CH 5	15606	974	CH 5	15610
398	CH 6	17108	976	CH 6	17104
400	CH 7	15529	978	CH 7	15524
402	CH 8	16602	980	CH 8	16598
404	CH 9	16341	982	CH 9	16341
406	CH 10	16501	984	CH 10	16507
408	CH 11	17550	986	CH 11	17549
410	CH 12	17727	988	CH 12	17729
412	CH 13	17400	990	CH 13	17404
414	CH 14	19372	992	CH 14	19358
416	CH 15	16471	994	CH 15	16468
418	REFLECTOR 1 POSITION 13	3827	996	REFLECTOR 1 POSITION 30	3827
420	REFLECTOR 2 POSITION 13	3476	998	REFLECTOR 2 POSITION 30	3476
422	REFL 1 POS 13 2ND LOOK	3827	1000	REFL 1 POS 30 2ND LOOK	3827
424	REFL 2 POS 13 2ND LOOK	3476	1002	REFL 2 POS 30 2ND LOOK	3476
426	COLD CAL SAMPLE 13 CH 3	15943	1004	COLD CAL SAMPLE 30 CH 3	15946
428	CH 4	16390	1006	CH 4	16392
430	CH 5	15604	1008	CH 5	15611
432	CH 6	17104	1010	CH 6	17110
434	CH 7	15528	1012	CH 7	15526
436	CH 8	16597	1014	CH 8	16598
438	CH 9	16341	1016	CH 9	16342
440	CH 10	16508	1018	CH 10	16506
442	CH 11	17549	1020	CH 11	17543
444	CH 12	17726	1022	CH 12	17738
446	CH 13	17409	1024	CH 13	17414
448	CH 14	19355	1026	CH 14	19367
450	CH 15	16469	1028	CH 15	16470
452	REFLECTOR 1 POSITION 14	3827	1030	REFLECTOR 1 COLD CAL POS	OE
454	REFLECTOR 2 POSITION 14	3475	1032	REFLECTOR 2 COLD CAL POS	OE
456	REFL 1 POS 14 2ND LOOK	3827	1034	REFL 1 COLD CAL 2ND LOOK	OE
458	REFL 2 POS 14 2ND LOOK	3476	1036	REFL 2 COLD CAL 2ND LOOK	OE
460	COLD CAL SAMPLE 14 CH 3	15938	1038	COLD CAL DATA 1 CH 3	0
462	CH 4	16391	1040	CH 4	0
464	CH 5	15606	1042	CH 5	0
466	CH 6	17107	1044	CH 6	0
468	CH 7	15527	1046	CH 7	0
470	CH 8	16597	1048	CH 8	0
472	CH 9	16342	1050	CH 9	0
474	CH 10	16510	1052	CH 10	0
476	CH 11	17547	1054	CH 11	0
478	CH 12	17732	1056	CH 12	0
480	CH 13	17409	1058	CH 13	0
482	CH 14	19378	1060	CH 14	0
484	CH 15	16467	1062	CH 15	0
486	REFLECTOR 1 POSITION 15	3827	1064	COLD CAL DATA 2 CH 3	0
488	REFLECTOR 2 POSITION 15	3476	1066	CH 4	0
490	REFL 1 POS 15 2ND LOOK	3827	1068	CH 5	0
492	REFL 2 POS 15 2ND LOOK	3476	1070	CH 6	0

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	COLD CAL SAMPLE 15	CH 3	15942	1072	CH 7
496		CH 4	16387	1074	CH 8
498		CH 5	15609	1076	CH 9
500		CH 6	17109	1078	CH 10
502		CH 7	15524	1080	CH 11
504		CH 8	16601	1082	CH 12
506		CH 9	16337	1084	CH 13
508		CH 10	16508	1086	CH 14
510		CH 11	17550	1088	CH 15
512		CH 12	17728	1182	REFLECTOR 1 WARM CAL POS
514		CH 13	17398	1184	REFLECTOR 2 WARM CAL POS
516		CH 14	19363	1186	REFL 1 WARM CAL 2ND LOOK
518		CH 15	16468	1188	REFL 2 WARM CAL 2ND LOOK
520	REFLECTOR 1 POSITION 16	CH 16	3827	1190	WARM CAL DATA 1
522	REFLECTOR 2 POSITION 16	CH 17	3476	1192	CH 3
524	REFL 1 POS 16 2ND LOOK	CH 18	3827	1194	CH 4
526	REFL 2 POS 16 2ND LOOK	CH 19	3475	1196	CH 5
528	COLD CAL SAMPLE 16	CH 20	15944	1198	CH 6
530		CH 21	16389	1200	CH 7
532		CH 22	15607	1202	CH 8
534		CH 23	17104	1204	CH 9
536		CH 24	15525	1206	CH 10
538		CH 25	16600	1208	CH 11
540		CH 26	16344	1210	CH 12
542		CH 27	16507	1212	CH 13
544		CH 28	17548	1214	CH 14
546		CH 29	17727	1216	CH 15
548		CH 30	17401	1218	CH 3
550		CH 31	19376	1220	CH 4
552		CH 32	16468	1222	CH 5
554	REFLECTOR 1 POSITION 17	CH 33	3827	1224	CH 6
556	REFLECTOR 2 POSITION 17	CH 34	3476	1226	CH 7
558	REFL 1 POS 17 2ND LOOK	CH 35	3827	1228	CH 8
560	REFL 2 POS 17 2ND LOOK	CH 36	3476	1230	CH 9
562	COLD CAL SAMPLE 17	CH 37	15937	1232	CH 10
564		CH 38	16387	1234	CH 11
566		CH 39	15607	1236	CH 12
568		CH 40	17105	1238	CH 13
570		CH 41	15523	1240	CH 14

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE	DEG C
1090	SCAN MOTOR A1-1	18085	23.09	
1092	SCAN MOTOR A1-2	19525	25.13	
1094	FEED HORN A1-1	20445	27.92	
1096	FEED HORN A1-2	21726	30.42	
1098	RF MUX A1-1	22651	32.01	
1100	RF MUX A1-2	24071	34.89	
1102	LOCAL OSCILLATOR CHANNEL 3	24995	36.90	
1104	LOCAL OSCILLATOR CHANNEL 4	25407	37.02	
1106	LOCAL OSCILLATOR CHANNEL 5	24252	35.42	
1108	LOCAL OSCILLATOR CHANNEL 6	22882	31.83	
1110	LOCAL OSCILLATOR CHANNEL 7	23385	33.53	
1112	LOCAL OSCILLATOR CHANNEL 8	24785	36.29	
1114	LOCAL OSCILLATOR CHANNEL 15	24474	35.25	
1116	PLLO #2	22670	32.07	
1118	PLLO #1	25605	37.81	
1120	1553 INTERFACE	18616	37.24	
1122	MIXER/IF AMPLIFIER CHANNEL 3	24380	35.45	
1124	MIXER/IF AMPLIFIER CHANNEL 4	24540	35.24	
1126	MIXER/IF AMPLIFIER CHANNEL 5	24140	34.87	
1128	MIXER/IF AMPLIFIER CHANNEL 6	22958	32.60	
1130	MIXER/IF AMPLIFIER CHANNEL 7	22989	33.22	
1132	MIXER/IF AMPLIFIER CHANNEL 8	24462	35.45	
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	22422	31.79	
1136	MIXER/IF AMPLIFIER CHANNEL 15	24221	35.28	
1138	IF AMPLIFIER CHANNEL 11 THRU 14	23985	34.62	
1140	IF AMPLIFIER CHANNEL 9	24166	34.88	
1142	IF AMPLIFIER CHANNEL 10	24016	34.85	
1144	IF AMPLIFIER CHANNEL 11	23137	32.29	
1146	DC/DC CONVERTER	25572	37.03	
1148	IF AMPLIFIER CHANNEL 13	22717	31.59	
1150	IF AMPLIFIER CHANNEL 14	23075	32.73	
1152	IF AMPLIFIER CHANNEL 12	22883	32.15	
1154	RF SHELF A1-1	23420	33.47	
1156	RF SHELF A1-2	24144	34.25	
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	20988	28.82	
1160	A1-1 WARM LOAD 1	23658	24.31	
1162	A1-1 WARM LOAD 2	24155	24.43	
1164	A1-1 WARM LOAD 3	23652	24.45	
1166	A1-1 WARM LOAD 4	23728	24.42	
1168	A1-1 WARM LOAD CENTER	23928	24.44	
1170	A1-2 WARM LOAD 1	25127	26.68	
1172	A1-2 WARM LOAD 2	25190	26.71	
1174	A1-2 WARM LOAD 3	25196	26.69	
1176	A1-2 WARM LOAD 4	25193	26.59	
1178	A1-2 WARM LOAD CENTER	25201	26.70	
1180	TEMP SENSOR REFERENCE VOLTAGE	25271		



STATUS

DESCRIPTION

ANTENNA IN FULL SCAN MODE	NO
ANTENNA IN WARM CAL MODE	NO
ANTENNA IN COLD CAL MODE	YES
ANTENNA IN NADIR MODE	NO
COLD CAL. POSITION LSB	ONE
COLD CAL. POSITION MSB	ONE
PLO REDUNDANCY	PLLO # 1
SCANNER A1-1 POWER	ON
SCANNER A1-2 POWER	ON
PLO #1 LOCK	YES
PLO #2 LOCK	OFF
ADC LATCHUP FLAG	ONE

ENGINEERING DATA

DESCRIPTION	VALUE	MA/VOLTS	DEG C
ENGINEERING DATA			
A1-1 SCANNER MOTOR TEMPERATURE			22.7
A1-1 RF SHELF TEMPERATURE #1			30.3
A1-1 WARM LOAD TEMPERATURE			23.7
A1-2 SCANNER MOTOR TEMPERATURE			25.5
A1-2 RF SHELF TEMPERATURE #1			34.8
A1-2 WARM LOAD TEMPERATURE			26.1
A1-1 RF SHELF TEMPERATURE #2			30.1
A1-2 RF SHELF TEMPERATURE #2			34.4
DESCRIPTION			
SIGNAL PROCESSOR	22077	4.9	
	21834	15.1	
	21797	-15.0	
SCAN DRIVE	22178	4.9	
	22207	14.9	
	21854	-15.1	
PLO	22546	14.8	
	22084	-15.2	
RECEIVER	21814	7.9	
MIXER/IF AMPLIFIER A1-1	21415	10.0	
A1-2	21429	10.0	
LO CHANNEL 6	21391	10.0	
7	21438	10.0	
SPARE	32767	327.7	
LO CHANNEL 3	21245	10.1	
4	21184	10.1	
5	21378	10.0	
8	21316	10.0	
15	22013	15.0	
QUIET BUS CURRENT	16295	2238.0	
A1-1 NOISY POWER BUS CURRENT	62	0.2	
A1-2 NOISY POWER BUS CURRENT	42	0.1	

## PRT TEMPERATURES

## VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

## FIXED TARGET

## BASEPLATE

## THERMOCOUPLE TEMPERATURES

## FIXED TARGET SHROUD

## VARIABLE TARGET SHROUD

## FIXED TARGET N2

## VARIABLE TARGET N2

## HEATER N2

## FIXED TARGET FLOW METER

## VARIABLE TARGET FLOW METER

## BASEPLATE HEATER N2

## BASEPLATE N2

## BASEPLATE FLOW METER

## ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00

EOS	A1-03	.EXE:41	COLD CAL. MODE	P1	19-NOV-98	13:23:34	AN NUMBER	1758
[ 5 ]	SCIENCE	DATA	ELEMENT 0000					
[ 6 ]	CONTROL/STATUS	ELEMENT	00					
[ 7 ]	ENGINEERING	ELEMENT	00					
		COMMANDS						
[ 9 ]	SCANNER A1-1	POWER =	ON				PLLO#1 [ 15 ]	
						COLD CAL POSITION 1 =		NO [ 16 ]
[ 10 ]	SCANNER A1-2	POWER =	ON			2 =		NO [ 17 ]
[ 11 ]	ANTENNA FULL SCAN	MODE =	NO			3 =		NO [ 18 ]
[ 12 ]	WARM CAL	=	NO			COLD CAL POSITION 4 =		YES [ 19 ]
[ 13 ]	COLD CAL	=	YES			RESET C&DH PROCESSOR		[ 20 ]
[ 14 ]	NADIR	=	NO			GSE MODE		[ 21 ]
ENGR OK	POWER	ON	CHECKSUM	IN 7D6B CALC 7D6B	SA28	1758 SA29	3505	
		SCREEN ONLY [ 2 ]	PRINT [ 3 ]	FULL		[ 1 ]	RETURN	

SELECT BUTTON 3

Cold Cal Position 4  
 Data in support of 3.3.5.3.3 Step 30  
 EOS A1 S/N 202 S/O 560863 Op 0580  
 TAR 60434 Op 8030

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	COLD CAL SAMPLE 17	16599
2		00000011	574	CH 8	16343
3	PACKET LENGTH	00000010	576	CH 9	16510
4		10111111	578	CH 10	17537
5	UNIT SERIAL NUMBER	00000011	580	CH 11	17727
6		00000000	582	CH 12	17397
7	INSTRUMENT MODE/STATUS	10011010	584	CH 13	19350
8		01101000	586	CH 14	16465
10	REFLECTOR 1 POSITION 1	3822	588	CH 15	3822
12	REFLECTOR 2 POSITION 1	3469	590	REFLECTOR 1 POSITION 18	3469
14	REFL 1 POS 1 2ND LOOK	3822	592	REFLECTOR 2 POSITION 18	3822
16	REFL 2 POS 1 2ND LOOK	3469	594	REFL 1 POS 18 2ND LOOK	3822
18	COLD CAL SAMPLE 1	15944	596	REFL 2 POS 18 2ND LOOK	3469
20	CH 3	16391	598	COLD CAL SAMPLE 18	15940
22	CH 4	15591	600	CH 3	16388
24	CH 5	17103	602	CH 4	15592
26	CH 6	15526	604	CH 5	17104
28	CH 7	16599	606	CH 6	15523
30	CH 8	16342	608	CH 7	16601
32	CH 9	16503	610	CH 8	16345
34	CH 10	17533	612	CH 9	16503
36	CH 11	17716	614	CH 10	17539
38	CH 12	17393	616	CH 11	17721
40	CH 13	19341	618	CH 12	17389
42	CH 14	16466	620	CH 13	19344
44	CH 15	3822	622	CH 14	16465
46	REFLECTOR 1 POSITION 2	3469	624	CH 15	3822
48	REFLECTOR 2 POSITION 2	3822	626	REFLECTOR 1 POSITION 19	3469
50	REFL 1 POS 2 2ND LOOK	3469	628	REFLECTOR 2 POSITION 19	3822
52	REFL 2 POS 2 2ND LOOK	15944	630	REFL 1 POS 19 2ND LOOK	3822
54	COLD CAL SAMPLE 2	16387	632	REFL 2 POS 19 2ND LOOK	3469
56	CH 3	15592	634	COLD CAL SAMPLE 19	15946
58	CH 4	17105	636	CH 3	16388
60	CH 5	15523	638	CH 4	15593
62	CH 6	16601	640	CH 5	17105
64	CH 7	16343	642	CH 6	15526
66	CH 8	16505	644	CH 7	16603
68	CH 9	17543	646	CH 8	16345
70	CH 10	17725	648	CH 9	16504
72	CH 11	17392	650	CH 10	17540
74	CH 12	19367	652	CH 11	17717
76	CH 13	16465	654	CH 12	17395
78	CH 14	3822	656	CH 13	19363
80	CH 15	3469	658	CH 14	16465
82	REFLECTOR 1 POSITION 3	3822	660	CH 15	3822
84	REFLECTOR 2 POSITION 3	3469	662	REFLECTOR 1 POSITION 20	3469
86	REFL 1 POS 3 2ND LOOK	3822	664	REFLECTOR 2 POSITION 20	3822
88	REFL 2 POS 3 2ND LOOK	3469	666	REFL 1 POS 20 2ND LOOK	3822
90	COLD CAL SAMPLE 3	15942	668	REFL 2 POS 20 2ND LOOK	3469
92	CH 3	16385	670	COLD CAL SAMPLE 20	15945
	CH 4	15593		CH 3	16387
	CH 5	17107		CH 4	15593
	CH 6			CH 5	17105

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15523	672	CH 7	15522
96	CH 8	16600	674	CH 8	16599
98	CH 9	16344	676	CH 9	16344
100	CH 10	16502	678	CH 10	16502
102	CH 11	17543	680	CH 11	17543
104	CH 12	17714	682	CH 12	17722
106	CH 13	17386	684	CH 13	17390
108	CH 14	19341	686	CH 14	19354
110	CH 15	16465	688	CH 15	16466
112	REFLECTOR 1 POSITION 4	3822	690	REFLECTOR 1 POSITION 21	3822
114	REFLECTOR 2 POSITION 4	3470	692	REFLECTOR 2 POSITION 21	3469
116	REFL 1 POS 4 2ND LOOK	3822	694	REFL 1 POS 21 2ND LOOK	3822
118	REFL 2 POS 4 2ND LOOK	3470	696	REFL 2 POS 21 2ND LOOK	3469
120	COLD CAL SAMPLE 4	15938	698	COLD CAL SAMPLE 21	15939
122	CH 3	16387	700	CH 4	16389
124	CH 4	15597	702	CH 5	15598
126	CH 5	17106	704	CH 6	17104
128	CH 6	15527	706	CH 7	15524
130	CH 7	16599	708	CH 8	16600
132	CH 8	16342	710	CH 9	16344
134	CH 9	16503	712	CH 10	16506
136	CH 10	17534	714	CH 11	17542
138	CH 11	17720	716	CH 12	17723
140	CH 12	17395	718	CH 13	17392
142	CH 13	19353	720	CH 14	19334
144	CH 14	16467	722	CH 15	16467
146	REFLECTOR 1 POSITION 5	3822	724	REFLECTOR 1 POSITION 22	3822
148	REFLECTOR 2 POSITION 5	3469	726	REFLECTOR 2 POSITION 22	3469
150	REFL 1 POS 5 2ND LOOK	3822	728	REFL 1 POS 22 2ND LOOK	3822
152	REFL 2 POS 5 2ND LOOK	3469	730	REFL 2 POS 22 2ND LOOK	3469
154	COLD CAL SAMPLE 5	15942	732	COLD CAL SAMPLE 22	15946
156	CH 3	16388	734	CH 4	16386
158	CH 4	15595	736	CH 5	15595
160	CH 5	17102	738	CH 6	17104
162	CH 6	15526	740	CH 7	15525
164	CH 7	16598	742	CH 8	16601
166	CH 8	16345	744	CH 9	16342
168	CH 9	16513	746	CH 10	16500
170	CH 10	17541	748	CH 11	17535
172	CH 11	17721	750	CH 12	17719
174	CH 12	17387	752	CH 13	17385
176	CH 13	19354	754	CH 14	19352
178	CH 14	16466	756	CH 15	16468
180	REFLECTOR 1 POSITION 6	3822	758	REFLECTOR 1 POSITION 23	3822
182	REFLECTOR 2 POSITION 6	3469	760	REFLECTOR 2 POSITION 23	3469
184	REFL 1 POS 6 2ND LOOK	3822	762	REFL 1 POS 23 2ND LOOK	3822
186	REFL 2 POS 6 2ND LOOK	3469	764	REFL 2 POS 23 2ND LOOK	3469
188	COLD CAL SAMPLE 6	15939	766	COLD CAL SAMPLE 23	15941
190	CH 3	16389	768	CH 4	16386
192	CH 4	15598	770	CH 5	15597

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17106	772	CH 6	17102
196	CH 7	15524	774	CH 7	15522
198	CH 8	16600	776	CH 8	16601
200	CH 9	16342	778	CH 9	16341
202	CH 10	16507	780	CH 10	16511
204	CH 11	17538	782	CH 11	17538
206	CH 12	17711	784	CH 12	17719
208	CH 13	17389	786	CH 13	17400
210	CH 14	19354	788	CH 14	19354
212	CH 15	16466	790	CH 15	16466
214	REFLECTOR 1 POSITION 7	3822	792	REFLECTOR 1 POSITION 24	3822
216	REFLECTOR 2 POSITION 7	3469	794	REFLECTOR 2 POSITION 24	3469
218	REFL 1 POS 7 2ND LOOK	3822	796	REFL 1 POS 24 2ND LOOK	3822
220	REFL 2 POS 7 2ND LOOK	3469	798	REFL 2 POS 24 2ND LOOK	3469
222	COLD CAL SAMPLE 7	15940	800	COLD CAL SAMPLE 24	15940
224	CH 3	16387	802	CH 3	16387
226	CH 4	15598	804	CH 4	15596
228	CH 5	17105	806	CH 5	17106
230	CH 6	15528	808	CH 6	15521
232	CH 7	16597	810	CH 7	16600
234	CH 8	16345	812	CH 8	16343
236	CH 9	16504	814	CH 9	16509
238	CH 10	17543	816	CH 10	17535
240	CH 11	17721	818	CH 11	17707
242	CH 12	17392	820	CH 12	17394
244	CH 13	19375	822	CH 13	19341
246	CH 14	16468	824	CH 14	16466
248	CH 15	3822	826	CH 15	3822
250	REFLECTOR 1 POSITION 8	3469	828	REFLECTOR 1 POSITION 25	3469
252	REFLECTOR 2 POSITION 8	3822	830	REFLECTOR 2 POSITION 25	3822
254	REFL 1 POS 8 2ND LOOK	3469	832	REFL 1 POS 25 2ND LOOK	3822
256	REFL 2 POS 8 2ND LOOK	15945	834	REFL 2 POS 25 2ND LOOK	3469
258	COLD CAL SAMPLE 8	15945	836	COLD CAL SAMPLE 25	15943
260	CH 3	16385	838	CH 3	16390
262	CH 4	15596	840	CH 4	15593
264	CH 5	17105	842	CH 5	17104
266	CH 6	15522	844	CH 6	15526
268	CH 7	16599	846	CH 7	16601
270	CH 8	16346	848	CH 8	16345
272	CH 9	16502	850	CH 9	16505
274	CH 10	17538	852	CH 10	17538
276	CH 11	17721	854	CH 11	17728
278	CH 12	17381	856	CH 12	17381
280	CH 13	19350	858	CH 13	19345
282	CH 14	16465	860	CH 14	16467
284	CH 15	3822	862	CH 15	3822
286	REFLECTOR 1 POSITION 9	3470	864	REFLECTOR 1 POSITION 26	3469
288	REFLECTOR 2 POSITION 9	3822	866	REFLECTOR 2 POSITION 26	3822
290	REFL 1 POS 9 2ND LOOK	3470	868	REFL 1 POS 26 2ND LOOK	3469
292	REFL 2 POS 9 2ND LOOK	15943	870	REFL 2 POS 26 2ND LOOK	15941
	COLD CAL SAMPLE 9	16385		COLD CAL SAMPLE 26	16385
	CH 3			CH 3	
	CH 4			CH 4	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15596	872	REFLECTOR 1 POSITION 27	3822
296	CH 6	17104	874	REFLECTOR 2 POSITION 27	3469
298	CH 7	15522	876	REFL 1 POS 27 2ND LOOK	3822
300	CH 8	16598	878	REFL 2 POS 27 2ND LOOK	3469
302	CH 9	16337	880	COLD CAL SAMPLE 27	15945
304	CH 10	16507	882	CH 3	16389
306	CH 11	17543	884	CH 4	16389
308	CH 12	17716	886	CH 5	15595
310	CH 13	17396	888	CH 6	17108
312	CH 14	19345	890	CH 7	15523
314	CH 15	16466	892	CH 8	16597
316	REFLECTOR 1 POSITION 10	3822	894	CH 9	16342
318	REFLECTOR 2 POSITION 10	3469	896	CH 10	16501
320	REFL 1 POS 10 2ND LOOK	3822	898	CH 11	17535
322	REFL 2 POS 10 2ND LOOK	3469	900	CH 12	17722
324	COLD CAL SAMPLE 10	15942	902	CH 13	17408
326	CH 3	16384	904	CH 14	19344
328	CH 4	15596	906	CH 15	16467
330	CH 5	17106	908	REFLECTOR 1 POSITION 28	3822
332	CH 6	15522	910	REFLECTOR 2 POSITION 28	3469
334	CH 7	16600	912	REFL 1 POS 28 2ND LOOK	3822
336	CH 8	16343	914	REFL 2 POS 28 2ND LOOK	3469
338	CH 9	16503	916	COLD CAL SAMPLE 28	15944
340	CH 10	17542	918	CH 3	16386
342	CH 11	17720	920	CH 4	15595
344	CH 12	17384	922	CH 5	17106
346	CH 13	19348	924	CH 6	15524
348	CH 14	16467	926	CH 7	15524
350	CH 15	3822	928	CH 8	16602
352	REFLECTOR 1 POSITION 11	3469	930	CH 9	16343
354	REFLECTOR 2 POSITION 11	3822	932	CH 10	16507
356	REFL 1 POS 11 2ND LOOK	3469	934	CH 11	17535
358	REFL 2 POS 11 2ND LOOK	15943	936	CH 12	17715
360	COLD CAL SAMPLE 11	16386	938	CH 13	17388
362	CH 3	15598	940	CH 14	19343
364	CH 4	17102	942	CH 15	16465
366	CH 5	15521	944	REFLECTOR 1 POSITION 29	3822
368	CH 6	16601	946	REFLECTOR 2 POSITION 29	3469
370	CH 7	16342	948	REFL 1 POS 29 2ND LOOK	3822
372	CH 8	16504	950	REFL 2 POS 29 2ND LOOK	3469
374	CH 9	17542	952	COLD CAL SAMPLE 29	15942
376	CH 10	17714	954	CH 3	
378	CH 11	17411	956	CH 4	
380	CH 12	19344	958	CH 5	
382	CH 13	16467	960	CH 6	
384	CH 14	3822	962	CH 7	
386	CH 15	3469	964	CH 8	
388	REFLECTOR 1 POSITION 12	3822	966	CH 9	
390	REFLECTOR 2 POSITION 12	3469	968	CH 10	
392	REFL 1 POS 12 2ND LOOK	15948	970	CH 11	
	REFL 2 POS 12 2ND LOOK			CH 12	
	COLD CAL SAMPLE 12			CH 13	
	CH 3			CH 14	
	CH 4			CH 15	
	REFLECTOR 1 POSITION 12				
	REFLECTOR 2 POSITION 12				
	REFL 1 POS 12 2ND LOOK				
	REFL 2 POS 12 2ND LOOK				
	COLD CAL SAMPLE 12				
	CH 3				

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16389	972	CH 4	16388
396	CH 5	15599	974	CH 5	15595
398	CH 6	17106	976	CH 6	17107
400	CH 7	15524	978	CH 7	15523
402	CH 8	16604	980	CH 8	16600
404	CH 9	16344	982	CH 9	16341
406	CH 10	16509	984	CH 10	16509
408	CH 11	17542	986	CH 11	17542
410	CH 12	17715	988	CH 12	17723
412	CH 13	17394	990	CH 13	17391
414	CH 14	19338	992	CH 14	19347
416	CH 15	16463	994	CH 15	16466
418	REFLECTOR 1 POSITION 13	3822	996	REFLECTOR 1 POSITION 30	3822
420	REFLECTOR 2 POSITION 13	3469	998	REFLECTOR 2 POSITION 30	3469
422	REFL 1 POS 13 2ND LOOK	3822	1000	REFL 1 POS 30 2ND LOOK	3822
424	REFL 2 POS 13 2ND LOOK	3469	1002	REFL 2 POS 30 2ND LOOK	3469
426	COLD CAL SAMPLE 13	15945	1004	COLD CAL SAMPLE 30	15942
428	CH 3	16385	1006	CH 3	16387
430	CH 4	15595	1008	CH 4	15595
432	CH 5	17106	1010	CH 5	17104
434	CH 6	15522	1012	CH 6	15523
436	CH 7	16602	1014	CH 7	16596
438	CH 8	16340	1016	CH 8	16344
440	CH 9	16503	1018	CH 9	16512
442	CH 10	17539	1020	CH 10	17532
444	CH 11	17726	1022	CH 11	17720
446	CH 12	17383	1024	CH 12	17391
448	CH 13	19350	1026	CH 13	19360
450	CH 14	16466	1028	CH 14	16467
452	CH 15	3822	1030	CH 15	OE
454	REFLECTOR 1 POSITION 14	3469	1032	REFLECTOR 1 COLD CAL POS	OE
456	REFLECTOR 2 POSITION 14	3822	1034	REFLECTOR 2 COLD CAL POS	OE
458	REFL 1 POS 14 2ND LOOK	3469	1036	REFL 1 COLD CAL 2ND LOOK	OE
460	REFL 2 POS 14 2ND LOOK	15940	1038	REFL 2 COLD CAL 2ND LOOK	0
462	COLD CAL SAMPLE 14	16387	1040	COLD CAL DATA 1	0
464	CH 3	15594	1042	CH 3	0
466	CH 4	17105	1044	CH 4	0
468	CH 5	15525	1046	CH 5	0
470	CH 6	16600	1048	CH 6	0
472	CH 7	16344	1050	CH 7	0
474	CH 8	16506	1052	CH 8	0
476	CH 9	17538	1054	CH 9	0
478	CH 10	17712	1056	CH 10	0
480	CH 11	17376	1058	CH 11	0
482	CH 12	19344	1060	CH 12	0
484	CH 13	16466	1062	CH 13	0
486	CH 14	3822	1064	CH 14	0
488	CH 15	3469	1066	CH 15	0
490	REFLECTOR 1 POSITION 15	3822	1068	REFLECTOR 1 COLD CAL DATA 2	0
492	REFLECTOR 2 POSITION 15	3469	1070	REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK			REFL 1 COLD CAL DATA 2	0
	REFL 2 POS 15 2ND LOOK			REFL 2 COLD CAL DATA 2	0



ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	COLD CAL SAMPLE 15	CH 3	1072		0
496		CH 4	1074	CH 7	0
498		CH 5	1076	CH 8	0
500		CH 6	1078	CH 9	0
502		CH 7	1080	CH 10	0
504		CH 8	1082	CH 11	0
506		CH 9	1084	CH 12	0
508		CH 10	1086	CH 13	0
510		CH 11	1088	CH 14	0
512		CH 12	1088	CH 15	0
514		CH 13	1182	REFLECTOR 1 WARM CAL POS	OE
516		CH 14	1184	REFLECTOR 2 WARM CAL POS	OE
518		CH 15	1186	REFL 1 WARM CAL 2ND LOOK	OE
520	REFLECTOR 1 POSITION 16	CH 16	1188	REFL 2 WARM CAL 2ND LOOK	OE
522	REFLECTOR 2 POSITION 16	CH 17	1190	WARM CAL DATA 1	0
524	REFL 1 POS 16 2ND LOOK	CH 18	1192	CH 3	0
526	REFL 2 POS 16 2ND LOOK	CH 19	1194	CH 4	0
528	COLD CAL SAMPLE 16	CH 20	1196	CH 5	0
530		CH 21	1198	CH 6	0
532		CH 22	1200	CH 7	0
534		CH 23	1202	CH 8	0
536		CH 24	1204	CH 9	0
538		CH 25	1206	CH 10	0
540		CH 26	1208	CH 11	0
542		CH 27	1210	CH 12	0
544		CH 28	1212	CH 13	0
546		CH 29	1214	CH 14	0
548		CH 30	1216	CH 15	0
550		CH 31	1218	CH 3	0
552		CH 32	1220	CH 4	0
554	REFLECTOR 1 POSITION 17	CH 33	1222	CH 5	0
556	REFLECTOR 2 POSITION 17	CH 34	1224	CH 6	0
558	REFL 1 POS 17 2ND LOOK	CH 35	1226	CH 7	0
560	REFL 2 POS 17 2ND LOOK	CH 36	1228	CH 8	0
562	COLD CAL SAMPLE 17	CH 37	1230	CH 9	0
564		CH 38	1232	CH 10	0
566		CH 39	1234	CH 11	0
568		CH 40	1236	CH 12	0
570		CH 41	1238	CH 13	0
		CH 42	1240	CH 14	0
		CH 43	1242	CH 15	0

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE DEG C
1090	SCAN MOTOR A1-1	18097	23.11
1092	SCAN MOTOR A1-2	19544	25.16
1094	FEED HORN A1-1	20464	27.96
1096	FEED HORN A1-2	21742	30.45
1098	RF MUX A1-1	22697	32.10
1100	RF MUX A1-2	24112	34.97
1102	LOCAL OSCILLATOR CHANNEL 3	25034	36.97
1104	LOCAL OSCILLATOR CHANNEL 4	25452	37.11
1106	LOCAL OSCILLATOR CHANNEL 5	24287	35.49
1108	LOCAL OSCILLATOR CHANNEL 6	22918	31.90
1110	LOCAL OSCILLATOR CHANNEL 7	23431	33.62
1112	LOCAL OSCILLATOR CHANNEL 8	24825	36.37
1114	LOCAL OSCILLATOR CHANNEL 15	24520	35.33
1116	PLLO #2	22710	32.15
1118	PLLO #1	25649	37.90
1120	1553 INTERFACE	18663	37.33
1122	MIXER/IF AMPLIFIER CHANNEL 3	24422	35.52
1124	MIXER/IF AMPLIFIER CHANNEL 4	24584	35.33
1126	MIXER/IF AMPLIFIER CHANNEL 5	24181	34.95
1128	MIXER/IF AMPLIFIER CHANNEL 6	23001	32.68
1130	MIXER/IF AMPLIFIER CHANNEL 7	23033	33.30
1132	MIXER/IF AMPLIFIER CHANNEL 8	24507	35.54
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	22465	31.87
1136	MIXER/IF AMPLIFIER CHANNEL 15	24269	35.37
1138	IF AMPLIFIER CHANNEL 11 THRU 14	24029	34.71
1140	IF AMPLIFIER CHANNEL 9	24211	34.97
1142	IF AMPLIFIER CHANNEL 10	24061	34.94
1144	IF AMPLIFIER CHANNEL 11	23183	32.38
1146	DC/DC CONVERTER	25582	37.05
1148	IF AMPLIFIER CHANNEL 13	22761	31.68
1150	IF AMPLIFIER CHANNEL 14	23121	32.82
1152	IF AMPLIFIER CHANNEL 12	22930	32.24
1154	RF SHELF A1-1	23458	33.55
1156	RF SHELF A1-2	24182	34.33
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	21028	28.89
1160	A1-1 WARM LOAD 1	23695	24.39
1162	A1-1 WARM LOAD 2	24191	24.50
1164	A1-1 WARM LOAD 3	23684	24.51
1166	A1-1 WARM LOAD 4	23768	24.50
1168	A1-1 WARM LOAD CENTER	23963	24.50
1170	A1-2 WARM LOAD 1	25173	26.77
1172	A1-2 WARM LOAD 2	25226	26.78
1174	A1-2 WARM LOAD 3	25238	26.78
1176	A1-2 WARM LOAD 4	25227	26.66
1178	A1-2 WARM LOAD CENTER	25239	26.77
1180	TEMP SENSOR REFERENCE VOLTAGE	25271	

DESCRIPTION      STATUS

ANTENNA IN FULL SCAN MODE	NO
ANTENNA IN WARM CAL MODE	NO
ANTENNA IN COLD CAL MODE	YES
ANTENNA IN NADIR MODE	NO
COLD CAL. POSITION LSB	ONE
COLD CAL. POSITION MSB	ONE
PLO REDUNDANCY	PLO # 1
SCANNER A1-1 POWER	ON
SCANNER A1-2 POWER	ON
PLO #1 LOCK	YES
PLO #2 LOCK	OFF
ADC LATCHUP FLAG	ONE

ENGINEERING DATA

DESCRIPTION	DEG C
A1-1 SCANNER MOTOR TEMPERATURE	22.7
A1-1 RF SHELF TEMPERATURE #1	30.3
A1-1 WARM LOAD TEMPERATURE	23.8
A1-2 SCANNER MOTOR TEMPERATURE	25.5
A1-2 RF SHELF TEMPERATURE #1	34.9
A1-2 WARM LOAD TEMPERATURE	26.2
A1-1 RF SHELF TEMPERATURE #2	30.2
A1-2 RF SHELF TEMPERATURE #2	34.4
DESCRIPTION	MA/VOLTS

SIGNAL PROCESSOR	+5 VDC	22066	4.9
	+15 VDC	21832	15.1
	-15 VDC	21798	-15.0
SCAN DRIVE	+5 VDC	22136	4.9
	+15 VDC	22131	14.9
	-15 VDC	21831	-15.1
PLO	+15 VDC	22549	14.8
	-15 VDC	22085	-15.2
RECEIVER	+8 VDC	21813	7.9
MIXER/IF AMPLIFIER A1-1	+10 VDC	21415	10.0
A1-2	+10 VDC	21430	10.0
LO CHANNEL 6	+10 VDC	21393	10.0
7	+10 VDC	21447	10.0
SPARE		32767	327.6
LO CHANNEL 3	+10 VDC	21248	10.1
4	+10 VDC	21189	10.1
5	+10 VDC	21375	10.0
8	+10 VDC	21310	10.0
15	+15 VDC	22014	15.0
QUIET BUS CURRENT		16377	2248.6
A1-1 NOISY POWER BUS CURRENT		64	0.3
A1-2 NOISY POWER BUS CURRENT		43	0.2

## PRT TEMPERATURES

## VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

## FIXED TARGET

## BASEPLATE

## THERMOCOUPLE TEMPERATURES

## FIXED TARGET SHROUD

## VARIABLE TARGET SHROUD

## FIXED TARGET N2

## VARIABLE TARGET N2

## HEATER N2

## FIXED TARGET FLOW METER

## VARIABLE TARGET FLOW METER

## BASEPLATE HEATER N2

## BASEPLATE N2

## BASEPLATE FLOW METER

## ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00

**TEST DATA SHEET NO. 12** (Sheet 1 of 2)  
Science and Engineering Data Test (Nadir Mode) (Paragraph 3.3.5.3.4)

Step	Instrument Status	(Y)es / (N)o
1	Nadir Mode command received?	Yes
2	ENGR OK message seen?	Yes
3	Both reflectors positioned at nadir position?	Yes

Yes = Pass No = Fail

Step	Element	Description	Measured Value* (Binary)	Required Value (Binary)	(P)ass/(F)ail
4a	1-2	Packet ID		0000100100000011	PASS
4b	3-4	Packet Length		0000001010111111	PASS
4c	5-6	Unit Serial Number		0000001100000000	PASS
4d	7-8	Instrument Mode/ Status		1001101000010000	PASS

RADIOMETER SCENE DATA			
Step	Description	Required Counts	(P)ass/(F)ail
4f	Review All Scene Data	12500-20500	PASS

PRT TEMPERATURE DATA				
Step	Element	Description	Required	(P)ass/(F)ail
4g	1090-1178	Review All PRT Data**	10-40 degrees C	PASS
4g	1180	Temperature Sensor Reference	23244-26317 counts	PASS

STATUS				
Step	Description	Status*	Required Status	(P)ass/(F)ail
4h	Antenna in Full Scan Mode		NO	PASS
	Antenna in Warm Cal Mode		NO	
	Antenna in Cold Cal Mode		NO	
	Antenna in Nadir Mode		YES	
	Cold Cal Position LSB		ZERO	
	Cold Cal Position MSB		ZERO	
	PLO Redundancy		PLO #1	
	Scanner A1-1 Power		ON	
	Scanner A1-2 Power		ON	
	PLO #1 Lock		YES	
	PLO #2 Lock		OFF	
	ADC Latchup Flag		ONE	PASS

\* Rewriting printout data on this data sheet is optional.

\*\* Refer to Table IV for PRT Data Description

EOS/AMSU-A1 System P/N 1356008  
Circle Test: 1<sup>st</sup> CPT Final CPTShop Order: 560863  
Sub CPT \_\_\_\_\_S/N: 202

LPT \_\_\_\_\_

Customer Representative

Date

Test Systems Engineer

Quality Control

Date

Date

TAR 004349 Op. 8029

TEST DATA SHEET NO. 12 (Sheet 2 of 2) -  
Science and Engineering Data Test (Nadir Mode) (Paragraph 3.3.5.3.4)

REFLECTOR POSITIONS (Step 4e)						
BP	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
1-30		336	PASS		16368	PASS
* Actual range (min to max) of counts from printout (Only beam positions 1-30). Rewriting counts on this data sheet is optional. ** Required counts from AE26002/1 TDS 5&6 +/- 5 counts for "true" nadir position.						

ENGINEERING DATA				
Step	Description	Measured***	Required	(P)ass/(F)ail
4i	Signal Processor (+5 VDC)		+4 to +6 volts	PASS
	Signal Processor (+15 VDC)		+14 to +16 volts	
	Signal Processor (-15 VDC)		-14 to -16 volts	
	Scan Drive (+5 VDC)		+4 to +6 volts	
	Scan Drive (+15 VDC)		+14 to +16 volts	
	Scan Drive (-15 VDC)		-14 to -16 volts	
	PLO (+15 VDC)		+14 to +16 volts	
	PLO (-15 VDC)		-14 to -16 volts	
	Receiver (+8 VDC)		+7 to +9 volts	
	Mixer/IF Amplifier A1-1 (+10 VDC)		+9 to +11 volts	
	Mixer/IF Amplifier A1-2 (+10 VDC)		+9 to +11 volts	
	LO Channel 6		+9 to +11 volts	
	LO Channel 7		+9 to +11 volts	
	LO Channel 3		+9 to +11 volts	
	LO Channel 4		+9 to +11 volts	
	LO Channel 5		+9 to +11 volts	
	LO Channel 8		+9 to +11 volts	
	LO Channel 15		+14 to +16 volts	
	Quiet Bus Current		$\leq 3$ Amps	
	A1-1 Noisy Bus Current		$\leq 125$ milliamps	
	A1-2 Noisy Bus Current		$\leq 125$ milliamps	PASS

\*\*\* Rewriting printout data on this data sheet is optional.

EOS/AMSU-A1 System P/N 1356008

Circle Test: 1<sup>st</sup> CPT

Final CPT

Shop Order: 560863

Sub CPT

S/N: 202

LPT

Customer Representative

Date

Test Systems Engineer

Quality Control

Date

```

EOS A1-03 .EXE:41 NADIR MODE
[ 5 ] SCIENCE DATA ELEMENT 0000
[ 6 ] CONTROL/STATUS ELEMENT 00
[ 7 ] ENGINEERING ELEMENT 00

      COMMANDS
[ 9 ] SCANNER A1-1 POWER = ON          COLD CAL POSITION 1 = YES [ 16 ]
[10 ] SCANNER A1-2 POWER = ON          2 = NO [ 17 ]
[11 ] ANTENNA FULL SCAN MODE = NO      3 = NO [ 18 ]
[12 ] WARM CAL = NO                   COLD CAL POSITION 4 = NO [ 19 ]
[13 ] COLD CAL = NO                   RESET C&DH PROCESSOR [ 20 ]
[14 ] NADIR = YES                     GSE MODE [ 21 ]

ENGR OK POWER ON CHECKSUM IN FC67 CALC FC67 SA28 1916 SA29 3821
SELECT BUTTON 3 SCREEN ONLY [ 2 ] PRINT [ 3 ] FULL [ 1 ] RETURN

```

Final CPT EOS A1 S/N202 S/O 560863 Op 0580

TAR 004349 Op 8030

Data in support of AE 26156/9A Para 3.3, 5.3, 4 Step 4

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
1	PACKET ID	00001001	572	NADIR SAMPLE	17
2		00000011	574		CH 8
3	PACKET LENGTH	00000010	576		CH 9
4		10111111	578		CH 10
5	UNIT SERIAL NUMBER	00000011	580		CH 11
6		00000000	582		CH 12
7	INSTRUMENT MODE/STATUS	10011010	584		CH 13
8		00010000	586		CH 14
10	REFLECTOR 1 POSITION	335	588	REFLECTOR 1 POSITION	18
12	REFLECTOR 2 POSITION	16369	590	REFLECTOR 2 POSITION	18
14	REFL 1 POS 1 2ND LOOK	335	592	REFL 1 POS 18 2ND LOOK	335
16	REFL 2 POS 1 2ND LOOK	16369	594	REFL 2 POS 18 2ND LOOK	16369
18	NADIR SAMPLE	15947	596	NADIR SAMPLE	18
20		16396	598		CH 3
22		15549	600		CH 4
24		17106	602		CH 5
26		15529	604		CH 6
28		16603	606		CH 7
30		16338	608		CH 8
32		16507	610		CH 9
34		17524	612		CH 10
36		17712	614		CH 11
38		17377	616		CH 12
40		19330	618		CH 13
42		16463	620		CH 14
44	REFLECTOR 1 POSITION	335	622	REFLECTOR 1 POSITION	19
46	REFLECTOR 2 POSITION	16369	624	REFLECTOR 2 POSITION	19
48	REFL 1 POS 2 2ND LOOK	335	626	REFL 1 POS 19 2ND LOOK	335
50	REFL 2 POS 2 2ND LOOK	16369	628	REFL 2 POS 19 2ND LOOK	16369
52	NADIR SAMPLE	15947	630	NADIR SAMPLE	19
54		16401	632		CH 3
56		15546	634		CH 4
58		17105	636		CH 5
60		15525	638		CH 6
62		16604	640		CH 7
64		16340	642		CH 8
66		16506	644		CH 9
68		17527	646		CH 10
70		17711	648		CH 11
72		17374	650		CH 12
74		19324	652		CH 13
76		16466	654		CH 14
78	REFLECTOR 1 POSITION	335	656	REFLECTOR 1 POSITION	20
80	REFLECTOR 2 POSITION	16369	658	REFLECTOR 2 POSITION	20
82	REFL 1 POS 3 2ND LOOK	335	660	REFL 1 POS 20 2ND LOOK	335
84	REFL 2 POS 3 2ND LOOK	16369	662	REFL 2 POS 20 2ND LOOK	16369
86	NADIR SAMPLE	15951	664	NADIR SAMPLE	20
88		16395	666		CH 3
90		15547	668		CH 4
92		17104	670		CH 5
					CH 6



ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
94	CH 7	15524	672	CH 7	15527
96	CH 8	16606	674	CH 8	16606
98	CH 9	16340	676	CH 9	16341
100	CH 10	16497	678	CH 10	16505
102	CH 11	17525	680	CH 11	17524
104	CH 12	17712	682	CH 12	17715
106	CH 13	17376	684	CH 13	17385
108	CH 14	19355	686	CH 14	19315
110	CH 15	16466	688	CH 15	16463
112	REFLECTOR 1 POSITION 4	335	690	REFLECTOR 1 POSITION 21	335
114	REFLECTOR 2 POSITION 4	16369	692	REFLECTOR 2 POSITION 21	16369
116	REFL 1 POS 4 2ND LOOK	335	694	REFL 1 POS 21 2ND LOOK	335
118	REFL 2 POS 4 2ND LOOK	16369	696	REFL 2 POS 21 2ND LOOK	16369
120	NADIR SAMPLE 4	15943	698	NADIR SAMPLE 21	15948
122	CH 3	16395	700	CH 3	16398
124	CH 4	15549	702	CH 4	16398
126	CH 5	17104	704	CH 5	15548
128	CH 6	15526	706	CH 6	17104
130	CH 7	16605	708	CH 7	15525
132	CH 8	16343	710	CH 8	16604
134	CH 9	16500	712	CH 9	16341
136	CH 10	17526	714	CH 10	16504
138	CH 11	17719	716	CH 11	17529
140	CH 12	17374	718	CH 12	17711
142	CH 13	19326	720	CH 13	17373
144	CH 14	16465	722	CH 14	19341
146	CH 15	335	724	CH 15	16465
148	REFLECTOR 1 POSITION 5	16369	726	REFLECTOR 1 POSITION 22	335
150	REFLECTOR 2 POSITION 5	335	728	REFLECTOR 2 POSITION 22	16369
152	REFL 1 POS 5 2ND LOOK	335	730	REFL 1 POS 22 2ND LOOK	335
154	REFL 2 POS 5 2ND LOOK	16369	732	REFL 2 POS 22 2ND LOOK	16369
156	NADIR SAMPLE 5	15948	734	NADIR SAMPLE 22	15953
158	CH 3	16397	736	CH 3	16393
160	CH 4	15549	738	CH 4	15551
162	CH 5	17106	740	CH 5	17104
164	CH 6	15526	742	CH 6	15527
166	CH 7	16602	744	CH 7	16608
168	CH 8	16343	746	CH 8	16341
170	CH 9	16507	748	CH 9	16503
172	CH 10	17520	750	CH 10	17527
174	CH 11	17722	752	CH 11	17718
176	CH 12	17382	754	CH 12	17380
178	CH 13	19359	756	CH 13	19338
180	CH 14	16464	758	CH 14	16464
182	CH 15	335	760	CH 15	335
184	REFLECTOR 1 POSITION 6	16369	762	REFLECTOR 1 POSITION 23	16369
186	REFLECTOR 2 POSITION 6	335	764	REFLECTOR 2 POSITION 23	335
188	REFL 1 POS 6 2ND LOOK	16369	766	REFL 1 POS 23 2ND LOOK	16369
190	REFL 2 POS 6 2ND LOOK	15948	768	REFL 2 POS 23 2ND LOOK	15948
192	NADIR SAMPLE 6	16397	770	NADIR SAMPLE 23	16395
	CH 3	15549		CH 3	15545
	CH 4			CH 4	
	CH 5			CH 5	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
194	CH 6	17106	772	CH 6	17106
196	CH 7	15527	774	CH 7	15527
198	CH 8	16603	776	CH 8	16603
200	CH 9	16338	778	CH 9	16338
202	CH 10	16501	780	CH 10	16501
204	CH 11	17525	782	CH 11	17525
206	CH 12	17713	784	CH 12	17713
208	CH 13	17372	786	CH 13	17370
210	CH 14	19339	788	CH 14	19328
212	CH 15	16465	790	CH 15	16466
214	REFLECTOR 1 POSITION 7	335	792	REFLECTOR 1 POSITION 24	335
216	REFLECTOR 2 POSITION 7	16369	794	REFLECTOR 2 POSITION 24	16369
218	REFL 1 POS 7 2ND LOOK	335	796	REFL 1 POS 24 2ND LOOK	335
220	REFL 2 POS 7 2ND LOOK	16369	798	REFL 2 POS 24 2ND LOOK	16369
222	NADIR SAMPLE 7	15943	800	NADIR SAMPLE 24	15948
224	CH 3	16397	802	CH 3	16397
226	CH 4	15549	804	CH 4	15548
228	CH 5	17104	806	CH 5	17107
230	CH 6	15524	808	CH 6	15527
232	CH 7	16603	810	CH 7	16609
234	CH 8	16343	812	CH 8	16347
236	CH 9	16504	814	CH 9	16503
238	CH 10	17527	816	CH 10	17530
240	CH 11	17709	818	CH 11	17720
242	CH 12	17366	820	CH 12	17375
244	CH 13	19326	822	CH 13	19335
246	CH 14	16465	824	CH 14	16465
248	CH 15	335	826	CH 15	335
250	REFLECTOR 1 POSITION 8	16369	828	REFLECTOR 1 POSITION 25	16369
252	REFLECTOR 2 POSITION 8	335	830	REFLECTOR 2 POSITION 25	335
254	REFL 1 POS 8 2ND LOOK	16369	832	REFL 1 POS 25 2ND LOOK	16369
256	REFL 2 POS 8 2ND LOOK	15950	834	REFL 2 POS 25 2ND LOOK	15953
258	NADIR SAMPLE 8	16398	836	NADIR SAMPLE 25	16396
260	CH 3	15551	838	CH 3	15548
262	CH 4	17108	840	CH 4	17107
264	CH 5	15527	842	CH 5	15523
266	CH 6	16603	844	CH 6	16605
268	CH 7	16343	846	CH 7	16341
270	CH 8	16503	848	CH 8	16506
272	CH 9	17525	850	CH 9	17530
274	CH 10	17716	852	CH 10	17721
276	CH 11	17361	854	CH 11	17382
278	CH 12	19323	856	CH 12	19353
280	CH 13	16465	858	CH 13	16463
282	CH 14	335	860	CH 14	335
284	CH 15	16369	862	CH 15	16369
286	REFLECTOR 1 POSITION 9	335	864	REFLECTOR 1 POSITION 26	335
288	REFLECTOR 2 POSITION 9	16369	866	REFLECTOR 2 POSITION 26	16369
290	REFL 1 POS 9 2ND LOOK	15946	868	REFL 1 POS 26 2ND LOOK	15950
292	REFL 2 POS 9 2ND LOOK	16397	870	REFL 2 POS 26 2ND LOOK	16392
	NADIR SAMPLE 9			NADIR SAMPLE 26	
	CH 3			CH 3	
	CH 4			CH 4	

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
294	CH 5	15546	872	CH 5	15545
296	CH 6	17103	874	CH 6	17104
298	CH 7	15529	876	CH 7	15527
300	CH 8	16607	878	CH 8	16607
302	CH 9	16340	880	CH 9	16343
304	CH 10	16503	882	CH 10	16505
306	CH 11	17526	884	CH 11	17526
308	CH 12	17713	886	CH 12	17706
310	CH 13	17382	888	CH 13	17367
312	CH 14	19338	890	CH 14	19339
314	CH 15	16466	892	CH 15	16465
316	REFLECTOR 1 POSITION 10	335	894	REFLECTOR 1 POSITION 27	335
318	REFLECTOR 2 POSITION 10	16369	896	REFLECTOR 2 POSITION 27	16369
320	REFL 1 POS 10 2ND LOOK	335	898	REFL 1 POS 27 2ND LOOK	335
322	REFL 2 POS 10 2ND LOOK	16369	900	REFL 2 POS 27 2ND LOOK	16369
324	NADIR SAMPLE 10	15946	902	NADIR SAMPLE 27	15948
326	CH 4	16395	904	CH 4	16397
328	CH 5	15549	906	CH 5	15551
330	CH 6	17103	908	CH 6	17105
332	CH 7	15525	910	CH 7	15527
334	CH 8	16606	912	CH 8	16606
336	CH 9	16340	914	CH 9	16339
338	CH 10	16499	916	CH 10	16503
340	CH 11	17526	918	CH 11	17525
342	CH 12	17699	920	CH 12	17710
344	CH 13	17373	922	CH 13	17376
346	CH 14	19332	924	CH 14	19333
348	CH 15	16464	926	CH 15	16465
350	REFLECTOR 1 POSITION 11	335	928	REFLECTOR 1 POSITION 28	335
352	REFLECTOR 2 POSITION 11	16369	930	REFLECTOR 2 POSITION 28	16369
354	REFL 1 POS 11 2ND LOOK	335	932	REFL 1 POS 28 2ND LOOK	335
356	REFL 2 POS 11 2ND LOOK	16369	934	REFL 2 POS 28 2ND LOOK	16369
358	NADIR SAMPLE 11	15951	936	NADIR SAMPLE 28	15946
360	CH 4	16395	938	CH 4	16392
362	CH 5	15547	940	CH 5	15554
364	CH 6	17108	942	CH 6	17106
366	CH 7	15526	944	CH 7	15527
368	CH 8	16605	946	CH 8	16608
370	CH 9	16341	948	CH 9	16340
372	CH 10	16502	950	CH 10	16502
374	CH 11	17526	952	CH 11	17529
376	CH 12	17723	954	CH 12	17711
378	CH 13	17367	956	CH 13	17378
380	CH 14	19333	958	CH 14	19345
382	CH 15	16464	960	CH 15	16464
384	REFLECTOR 1 POSITION 12	335	962	REFLECTOR 1 POSITION 29	335
386	REFLECTOR 2 POSITION 12	16369	964	REFLECTOR 2 POSITION 29	16369
388	REFL 1 POS 12 2ND LOOK	335	966	REFL 1 POS 29 2ND LOOK	335
390	REFL 2 POS 12 2ND LOOK	16369	968	REFL 2 POS 29 2ND LOOK	16369
392	NADIR SAMPLE 12	15949	970	NADIR SAMPLE 29	15946

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
394	CH 4	16392	972	CH 4	16394
396	CH 5	15545	974	CH 5	15551
398	CH 6	17103	976	CH 6	17103
400	CH 7	15526	978	CH 7	15524
402	CH 8	16605	980	CH 8	16605
404	CH 9	16343	982	CH 9	16346
406	CH 10	16500	984	CH 10	16505
408	CH 11	17525	986	CH 11	17528
410	CH 12	17716	988	CH 12	17709
412	CH 13	17368	990	CH 13	17381
414	CH 14	19341	992	CH 14	19337
416	CH 15	16465	994	CH 15	16465
418	REFLECTOR 1 POSITION 13	335	996	REFLECTOR 1 POSITION 30	335
420	REFLECTOR 2 POSITION 13	16369	998	REFLECTOR 2 POSITION 30	16369
422	REFL 1 POS 13 2ND LOOK	335	1000	REFL 1 POS 30 2ND LOOK	335
424	REFL 2 POS 13 2ND LOOK	16369	1002	REFL 2 POS 30 2ND LOOK	16369
426	NADIR SAMPLE 13	15949	1004	NADIR SAMPLE 30	15937
428	CH 3	16398	1006	CH 3	16394
430	CH 4	15548	1008	CH 4	15552
432	CH 5	17102	1010	CH 5	17103
434	CH 6	15528	1012	CH 6	15525
436	CH 7	16602	1014	CH 7	16606
438	CH 8	16341	1016	CH 8	16344
440	CH 9	16503	1018	CH 9	16507
442	CH 10	17529	1020	CH 10	17527
444	CH 11	17713	1022	CH 11	17714
446	CH 12	17369	1024	CH 12	17364
448	CH 13	19336	1026	CH 13	19345
450	CH 14	16463	1028	CH 14	16464
452	CH 15	335	1030	CH 15	OE
454	REFLECTOR 1 POSITION 14	16369	1032	REFLECTOR 1 COLD CAL POS	OE
456	REFLECTOR 2 POSITION 14	335	1034	REFLECTOR 2 COLD CAL POS	OE
458	REFL 1 POS 14 2ND LOOK	16369	1036	REFL 1 COLD CAL 2ND LOOK	OE
460	REFL 2 POS 14 2ND LOOK	15948	1038	REFL 2 COLD CAL 2ND LOOK	OE
462	NADIR SAMPLE 14	16395	1040	COLD CAL DATA 1	0
464	CH 3	15547	1042	CH 3	0
466	CH 4	17103	1044	CH 4	0
468	CH 5	15525	1046	CH 5	0
470	CH 6	16607	1048	CH 6	0
472	CH 7	16340	1050	CH 7	0
474	CH 8	16507	1052	CH 8	0
476	CH 9	17521	1054	CH 9	0
478	CH 10	17716	1056	CH 10	0
480	CH 11	17378	1058	CH 11	0
482	CH 12	19348	1060	CH 12	0
484	CH 13	16464	1062	CH 13	0
486	CH 14	335	1064	CH 14	0
488	CH 15	16369	1066	CH 15	0
490	REFLECTOR 1 POSITION 15	335	1068	REFLECTOR 1 COLD CAL DATA 2	0
492	REFLECTOR 2 POSITION 15	16369	1070	REFLECTOR 2 COLD CAL DATA 2	0
	REFL 1 POS 15 2ND LOOK	335		REFL 1 COLD CAL 2ND LOOK	0
	REFL 2 POS 15 2ND LOOK	16369		REFL 2 COLD CAL 2ND LOOK	0
				COLD CAL DATA 1	0
				CH 3	0
				CH 4	0
				CH 5	0
				CH 6	0
				CH 7	0
				CH 8	0
				CH 9	0
				CH 10	0
				CH 11	0
				CH 12	0
				CH 13	0
				CH 14	0
				CH 15	0
				CH 3	0
				CH 4	0
				CH 5	0
				CH 6	0

ELEMENT	DESCRIPTION	VALUE	ELEMENT	DESCRIPTION	VALUE
494	NADIR SAMPLE 15	CH 3	15951	1072	CH 7
496		CH 4	16398	1074	CH 8
498		CH 5	15548	1076	CH 9
500		CH 6	17102	1078	CH 10
502		CH 7	15524	1080	CH 11
504		CH 8	16607	1082	CH 12
506		CH 9	16342	1084	CH 13
508		CH 10	16507	1086	CH 14
510		CH 11	17527	1088	CH 15
512		CH 12	17716	1182	REFLECTOR 1 WARM CAL POS
514		CH 13	17370	1184	REFLECTOR 2 WARM CAL POS
516		CH 14	19333	1186	REFL 1 WARM CAL 2ND LOOK
518		CH 15	16465	1188	REFL 2 WARM CAL 2ND LOOK
520	REFLECTOR 1 POSITION 16	CH 16	335	1190	WARM CAL DATA 1
522	REFLECTOR 2 POSITION 16	CH 16	16369	1192	CH 3
524	REFL 1 POS 16 2ND LOOK	CH 16	335	1194	CH 4
526	REFL 2 POS 16 2ND LOOK	CH 16	16369	1196	CH 5
528	NADIR SAMPLE 16	CH 3	15949	1198	CH 6
530		CH 4	16395	1200	CH 7
532		CH 5	15550	1202	CH 8
534		CH 6	17107	1204	CH 9
536		CH 7	15525	1206	CH 10
538		CH 8	16607	1208	CH 11
540		CH 9	16341	1210	CH 12
542		CH 10	16500	1212	CH 13
544		CH 11	17523	1214	CH 14
546		CH 12	17711	1216	CH 15
548		CH 13	17367	1218	CH 3
550		CH 14	19334	1220	CH 4
552		CH 15	16465	1222	CH 5
554	REFLECTOR 1 POSITION 17	CH 17	335	1224	CH 6
556	REFLECTOR 2 POSITION 17	CH 17	16369	1226	CH 7
558	REFL 1 POS 17 2ND LOOK	CH 17	335	1228	CH 8
560	REFL 2 POS 17 2ND LOOK	CH 17	16369	1230	CH 9
562	NADIR SAMPLE 17	CH 3	15941	1232	CH 10
564		CH 4	16395	1234	CH 11
566		CH 5	15551	1236	CH 12
568		CH 6	17106	1238	CH 13
570		CH 7	15525	1240	CH 14

ELEMENT	DESCRIPTION	VALUE	TEMPERATURE	DEG C
1090	SCAN MOTOR A1-1	18119	23.16	
1092	SCAN MOTOR A1-2	19561	25.19	
1094	FEED HORN A1-1	20602	28.22	
1096	FEED HORN A1-2	21844	30.65	
1098	RF MUX A1-1	22777	32.25	
1100	RF MUX A1-2	24181	35.11	
1102	LOCAL OSCILLATOR CHANNEL 3	25108	37.12	
1104	LOCAL OSCILLATOR CHANNEL 4	25523	37.24	
1106	LOCAL OSCILLATOR CHANNEL 5	24341	35.59	
1108	LOCAL OSCILLATOR CHANNEL 6	22997	32.05	
1110	LOCAL OSCILLATOR CHANNEL 7	23505	33.76	
1112	LOCAL OSCILLATOR CHANNEL 8	24894	36.51	
1114	LOCAL OSCILLATOR CHANNEL 15	24591	35.47	
1116	PILLO #2	22781	32.29	
1118	PILLO #1	25720	38.03	
1120	1553 INTERFACE	18742	37.48	
1122	MIXER/IF AMPLIFIER CHANNEL 3	24490	35.65	
1124	MIXER/IF AMPLIFIER CHANNEL 4	24650	35.46	
1126	MIXER/IF AMPLIFIER CHANNEL 5	24243	35.07	
1128	MIXER/IF AMPLIFIER CHANNEL 6	23079	32.83	
1130	MIXER/IF AMPLIFIER CHANNEL 7	23110	33.45	
1132	MIXER/IF AMPLIFIER CHANNEL 8	24573	35.67	
1134	MIXER/IF AMPLIFIER CH 9 THRU 14	22542	32.02	
1136	MIXER/IF AMPLIFIER CHANNEL 15	24342	35.51	
1138	IF AMPLIFIER CHANNEL 11 THRU 14	24100	34.85	
1140	IF AMPLIFIER CHANNEL 9	24282	35.10	
1142	IF AMPLIFIER CHANNEL 10	24134	35.08	
1144	IF AMPLIFIER CHANNEL 11	23262	32.53	
1146	DC/DC CONVERTER	25629	37.14	
1148	IF AMPLIFIER CHANNEL 13	22839	31.83	
1150	IF AMPLIFIER CHANNEL 14	23199	32.97	
1152	IF AMPLIFIER CHANNEL 12	23010	32.40	
1154	RF SHELF A1-1	23529	33.68	
1156	RF SHELF A1-2	24247	34.46	
1158	DETECTOR/PREAMPLIFIER ASSEMBLY	21106	29.04	
1160	A1-1 WARM LOAD 1	23761	24.52	
1162	A1-1 WARM LOAD 2	24257	24.63	
1164	A1-1 WARM LOAD 3	23755	24.65	
1166	A1-1 WARM LOAD 4	23831	24.62	
1168	A1-1 WARM LOAD CENTER	24029	24.63	
1170	A1-2 WARM LOAD 1	25235	26.89	
1172	A1-2 WARM LOAD 2	25289	26.91	
1174	A1-2 WARM LOAD 3	25303	26.91	
1176	A1-2 WARM LOAD 4	25294	26.79	
1178	A1-2 WARM LOAD CENTER	25301	26.89	
1180	TEMP SENSOR REFERENCE VOLTAGE	25271		

## DESCRIPTION

## STATUS

ANTENNA IN FULL SCAN MODE	NO
ANTENNA IN WARM CAL MODE	NO
ANTENNA IN COLD CAL MODE	NO
ANTENNA IN NADIR MODE	YES
COLD CAL. POSITION LSB	ZERO
COLD CAL. POSITION MSB	ZERO
PLO REDUNDANCY	PLLO # 1
SCANNER A1-1 POWER	ON
SCANNER A1-2 POWER	ON
PLLO #1 LOCK	YES
PLLO #2 LOCK	OFF
ADC LATCHUP FLAG	ONE

## ENGINEERING DATA

## DESCRIPTION

## DEG C

A1-1 SCANNER MOTOR TEMPERATURE	22.7
A1-1 RF SHELF TEMPERATURE #1	30.5
A1-1 WARM LOAD TEMPERATURE	24.0
A1-2 SCANNER MOTOR TEMPERATURE	25.5
A1-2 RF SHELF TEMPERATURE #1	35.0
A1-2 WARM LOAD TEMPERATURE	26.3
A1-1 RF SHELF TEMPERATURE #2	30.4
A1-2 RF SHELF TEMPERATURE #2	34.6

## VALUE

## MA/VOLTS

## SIGNAL PROCESSOR

+5 VDC	22054	4.9
+15 VDC	21832	15.1
-15 VDC	21798	-15.0
+5 VDC	22132	4.9
+15 VDC	22144	14.9
-15 VDC	21842	-15.1
+15 VDC	22545	14.8
-15 VDC	22082	-15.2
+8 VDC	21812	7.9
+10 VDC	21416	10.0
+10 VDC	21429	10.0
+10 VDC	21391	10.0
+10 VDC	21454	10.0

## LO CHANNEL 6 7

SPARE	32767	327.4
LO CHANNEL 3	21247	10.1
4	21181	10.1
5	21376	10.0
8	21302	10.0
15	22015	15.0

## QUIET BUS CURRENT

A1-1 NOISY POWER BUS CURRENT	16261	2236.4
A1-2 NOISY POWER BUS CURRENT	67	0.5
	44	0.4

## PRT TEMPERATURES

## VARIABLE TARGET

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
615	42.00	601	14.00
616	43.00	602	15.00
617	44.00	603	16.00
618	45.00	604	17.00
619	46.00	605	18.00
620	47.00	606	19.00
621	48.00	607	20.00
622	49.00	608	21.00
623	50.00	609	22.00
624	51.00	610	23.00
625	52.00	611	24.00
626	53.00	612	25.00
627	67.00	613	69.00
628	68.00	614	70.00
629	71.00	630	72.00
631	26.00	632	27.00

## FIXED TARGET

## BASEPLATE

## THERMOCOUPLE TEMPERATURES

## FIXED TARGET SHROUD

## VARIABLE TARGET SHROUD

## FIXED TARGET N2

## VARIABLE TARGET N2

## HEATER N2

## FIXED TARGET FLOW METER

## VARIABLE TARGET FLOW METER

## BASEPLATE HEATER N2

## BASEPLATE N2

## BASEPLATE FLOW METER

## ADJUNCT RADIATORS

A1-1		A1-2	
NO.	DEG K	NO.	DEG K
558	5.00	537	34.00
559	6.00	538	35.00
550	7.00	524	36.00
551	8.00	525	37.00
506	57.00	502	30.00
507	58.00	503	31.00
516	59.00	511	32.00
517	60.00	512	33.00
514	1.00	509	38.00
515	2.00	510	39.00
508	63.00	504	61.00
518	64.00	513	62.00
519	3.00	520	4.00
521	9.00	522	10.00
523	65.00		
575	73.00	577	74.00
579	75.00	581	76.00



**Electronic Systems Plant**

P.O. Box 296

Azusa, California 91702-0296

CAGE/Facility Ident: 70143

**GENCORP**  
**AEROJET**

**AE-26156/9A**  
**19 August 1998**

---

*S/O 560863, P/N 1356008-1-TST,  
S/N 202, OP: 150540 THRU Q585  
12 NOV 98 (267)*

**PROCESS SPECIFICATION**

**EOS/AMSU-A1, SYSTEM COMPREHENSIVE  
AND LIMITED PERFORMANCE TESTS  
TEST PROCEDURE**



**Electronic Systems Plant**

P.O. Box 296

Azusa, California 91702-0296

CAGE/Facility Ident: 70143



**AE-26156/9A**  
**19 August 1998**

---

**PROCESS SPECIFICATION**

**EOS/AMSU-A1, SYSTEM COMPREHENSIVE  
AND LIMITED PERFORMANCE TESTS  
TEST PROCEDURE**

## TABLE OF CONTENTS

Paragraph		Page
1.	SCOPE .....	1
1.1	Scope.....	1
1.2	Procedure sequence.....	1
2.	APPLICABLE DOCUMENTS.....	3
2.1	Government documents.....	3
2.2	Non government documents.....	3
2.2.1	TRW documents .....	3
2.2.2	Aerojet documents .....	3
3.	REQUIREMENTS.....	5
3.1	Equipment .....	5
3.2	Materials .....	5
3.3	Required procedures and operations .....	5
3.3.1	Integration and test preliminary conditions .....	5
3.3.1.1	Limited performance test (LPT).....	5
3.3.1.2	Comprehensive performance test (CPT) .....	5
3.3.1.3	Integration and test facilities .....	5
3.3.1.4	Environment.....	5
3.3.1.5	Subsystem testing/inspection.....	5
3.3.1.6	Electrostatic discharge (ESD) certification .....	5
3.3.1.7	CPT/LPT preparation checklist.....	5
3.3.2	Antenna subsystem integration test .....	8
3.3.3	Operational power interface test.....	8
3.3.3.1	Quiet power bus interface tests .....	8
3.3.3.1.1	Quiet power bus operational power test .....	11
3.3.3.1.2	Quiet power bus operational power test (LPT only) .....	16
3.3.3.1.3	Quiet power bus turn on transient test .....	18
3.3.3.2	Noisy power bus interface tests.....	21
3.3.3.2.1	Noisy power bus operational power test .....	21
3.3.3.2.2	Noisy power bus turn on transient test .....	26
3.3.3.3	Survival heater power bus interface tests .....	29
3.3.4	Passive analog interface test.....	29
3.3.5	Command and data handling bus interface test .....	29
3.3.5.1	Formal qualification test of the EOS/AMSU-A1 firmware (protoflight model 1 <sup>st</sup> CPT only) .....	30
3.3.5.2	Instrument commanding test .....	30
3.3.5.3	Science and engineering data verification .....	33
3.3.5.3.1	Full scan mode .....	33
3.3.5.3.2	Warm cal mode .....	34
3.3.5.3.3	Cold cal mode .....	36
3.3.5.3.4	Nadir mode.....	38
3.3.5.3.5	Noisy Bus current measurement during warm cal, cold cal and nadir mode .....	39
3.3.5.4	1553 Bus interface test .....	39
3.3.6	Test point interface test .....	40
3.3.6.1	Intentionally Left Blank .....	40
3.3.6.2	8 second sync pulse test point verification .....	40
3.3.6.3	Integrate/hold and dump test point verification.....	42
3.3.6.4	Radiometer channel analog output test point verification .....	42
3.3.6.5	PLO #1 and PLO #2 lock test point verification .....	44
3.3.6.6	GSE-1 mode verification.....	44
3.3.6.7	GSE-2 mode verification.....	45

## TABLE OF CONTENTS (CONT)

Paragraph		Page
3.3.6.8	GSE-3 mode verification .....	45
3.3.6.9	GSE-4 mode verification .....	46
3.3.6.10	GSE-5 mode verification .....	46
3.3.6.11	GSE-7 mode verification .....	47
3.3.7	Radiometer functional performance test .....	48
3.3.7.1	PLO frequency measurements .....	48
3.3.7.2	Relative radiometer NEΔT measurements .....	49
3.3.8	Channel identification test .....	52
4.	QUALITY ASSURANCE PROVISIONS .....	57
4.1	Responsibility for inspection .....	57
4.1.1	Test facilities .....	57
4.1.2	Electrostatic device (ESD) handling .....	57
4.2	Monitoring procedures .....	57
4.2.1	Test equipment .....	57
4.2.2	Software .....	57
4.3	Monitoring procedures for materials .....	57
4.4	Certification .....	57
4.5	Test methods .....	57
4.5.1	Accept-reject criteria .....	57
4.5.2	General .....	57
4.5.2.1	Acceptance test reports .....	58
4.5.2.1.1	Format .....	58
4.5.2.1.2	Test data .....	58
5.	NOTES .....	59
5.1	Intended use .....	59
5.2	Abbreviations and acronyms .....	59
10.	APPENDIX A - TEST DATA SHEETS .....	A-1

## FIGURES

Figure		Page
1	Sequence of EOS/AMSU-A2 Subsystem Integration Testing .....	1
2	Special Test Equipment (STE ) (1356655) .....	9
3	STE Power Supply Layout .....	9
4	STE Rear Power Supply Panel Layout .....	10
5	STE Rear Test Panel Layout .....	10
6	STE Rear Interface Panel Layout .....	10
7	Setup for Grounding Interface Test .....	11
8	Setup for Quiet Bus Operational Power Tests .....	12
9	EOS/AMSU-A1 STE Main Screen .....	14
10	EOS/AMSU-A1 STE Monitor Only Screen .....	14
11	EOS/AMSU-A1 STE Commands Screen .....	15
12	Test Setup of Unit Connected to STE .....	17
13	Typical Quiet Bus Turn On Transient .....	20
14	Typical Quiet Bus Turn On Expanded .....	20
15	Setup for Noisy Bus Operational Power Tests .....	22
16	Typical Noisy Power Bus Current .....	25
17	Typical Noisy Power Bus Integration .....	25

## FIGURES (CONT)

Figure		Page
18	Typical Noisy Bus Turn On Transient .....	28
19	Typical Noisy Bus Turn On Expanded .....	28
20	EOS/AMSU-A1 STE Unpowered Thermistors Screen .....	30
21	Configuration for 1553 Interface Set Up .....	40
22	Typical 1553 Bus Wave Form (Instrument Response) .....	41
23	Typical Rise Yime Measured .....	41
24	Integrate/Hold, Dump, and Analog Out Test Point Signals .....	42
25	Typical Spectrum Analyzer Plot of PLO Frequency .....	49
26	Relative NEAT Test Setup .....	51
27	Typical Screen Display Following a Functional Test .....	53
28	Channel Identification Setup .....	53
29	Science Data Screen .....	54
30	Radiometric Data Screen .....	54

## TABLES

Table		Page
I	Required Test Equipment .....	6
II	AMSU-A1 Performance Tests .....	7
III	EOS/AMSU-A1 Instrument Commands .....	31
IV	Prt Data Description .....	35

## TEST DATA SHEETS

TDS		Page
1	Grounding Interface Test .....	A-2
2	Quiet Power Bus Operational Power Test .....	A-8
3	Quiet Power Bus Operational Power Test (LPT) .....	A-9
4	Quiet Power Bus Turn On Transient Test .....	A-10
5	Noisy Power Bus Operational Power Test .....	A-11
6	Noisy Power Bus Turn On Transient Test .....	A-12
7	Passive Analog Interface Test .....	A-13
8	Instrument Commanding Test .....	A-14
9	Science and Engineering Data Test (Full Scan Mode) .....	A-15
10	Science and Engineering Data Test (Warm Cal Mode) .....	A-18
11	Science and Engineering Data Test (Cold Cal Mode) .....	A-20
12	Science and Engineering Data Test (Nadir Mode) .....	A-25
13	Noisy Bus Current Measurement During Warm Cal, Cold Cal and Nadir .....	A-27
14	1553 Bus Interface Test .....	A-28
15	Test Point Interface Test (8 Second Sync Pulse TP) .....	A-29
16	Test Point Interface Test (Integrate/Hold and Dump TPs) .....	A-30
17	Test Point Interface Test (Radiometer Channel Analog Output TPs) .....	A-31
18	Test Point Interface Test (PLO #1 and PLO #2 Lock TPs) .....	A-32
19	Test Point Interface Test (GSE Modes) .....	A-33
20	Radiometer Functional Performance Test (PLO Frequency Measurements) .....	A-34
21	Radiometer Functional Performance Test (Relative NEAT Measurements) .....	A-35
22	Channel Identification Test .....	A-37

## 1. SCOPE

**1.1 Scope.** This process specification establishes the requirements for the Comprehensive Performance Test (CPT) and Limited Performance Test (LPT) of the Earth Observing System Advanced Microwave Sounding Unit - A1 (EOS/AMSU-A1), referred to as the unit. The unit is defined on Drawing 1356008.

**1.2 Procedure sequence.** The sequence of CPT/LPT testing is shown in Figure 1. At the discretion of the test engineer the order of tests may be changed.

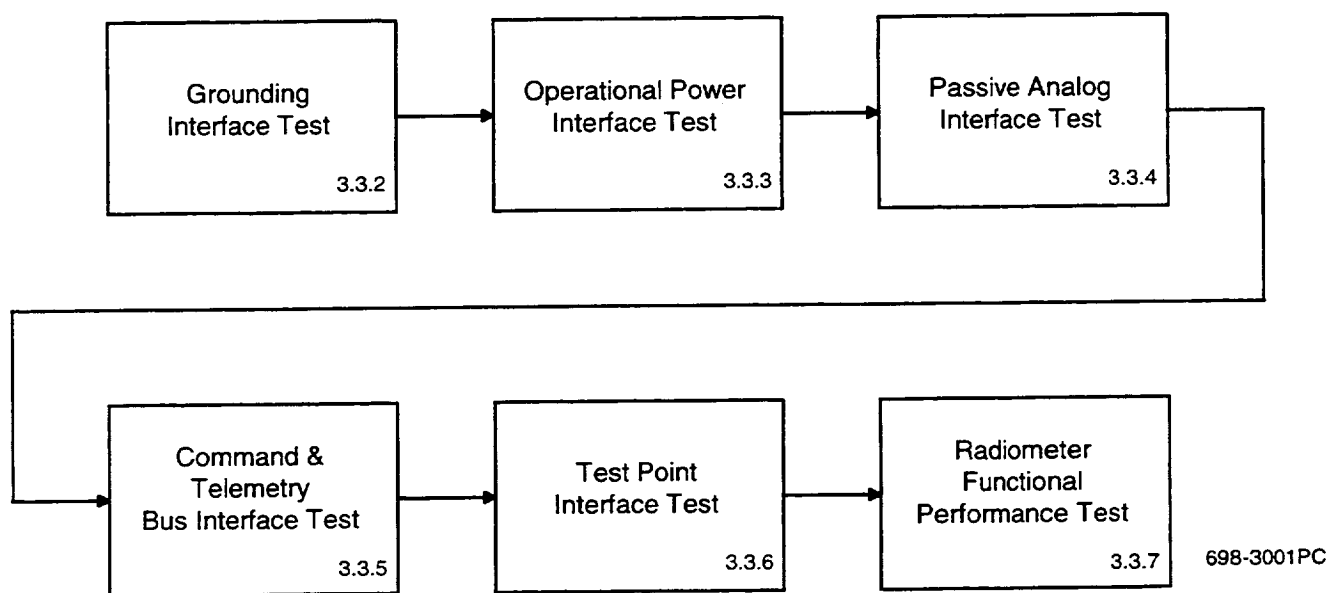


Figure 1. Sequence of EOS/AMSU-A1 CPT/LPT Testing

This page intentionally left blank.



## 2. APPLICABLE DOCUMENTS

**2.1 Government documents.** The following documents form a part of this specification to the extent specified herein. The latest issue is applicable.

### SPECIFICATIONS

#### NASA (Goddard Space Flight Center (GSFC))

S-480-80	Performance and Operation Specification for the EOS/ METSAT Integrated Programs AMSU-A Instrument (POS)
S-480-79	Performance Assurance Requirements for the EOS/METSAT Integrated Programs AMSU-A Instrument (PAR)
422-11-12-01	General Interface Requirements Document for EOS Common Spacecraft /Instruments EOS PM Project (GIRD)
422-12-12-02	Unique Instrument Interface Document for the Advanced Microwave Sounding Unit (AMSU-A) EOS PM Project (UIID)

### STANDARDS

MIL-STD-45662	Calibration Systems Requirements
---------------	----------------------------------

(Copies of government documents should be obtained as indicated in the Department of Defense Index of Specifications and Standards).

**2.2 Non government documents.** The following documents form a part of this specification to the extent specified herein. The latest issue is applicable.

#### **2.2.1 TRW documents**

### SPECIFICATIONS

D24844	Interface Control Document for Advanced Microwave Sounding Unit - A1 (ICD)
D25092	Instrument Interface Database for the AMSU-A1

(Copies of TRW documents may be obtained from TRW Inc.)

#### **2.2.2 Aerojet documents**

### STANDARDS

STD-2454	Requirements for Electrostatic Discharge Control
----------	--

### SPECIFICATIONS

AE-26002/1	AMSU-A1 Antenna Drive Subsystem Test Procedure
AE-26156/7	EOS/AMSU-A1 Subsystem Integration Procedure
AE-26357	AMSU-A Transportation and Handling Procedure

AE-26156/9A  
19 Aug 98

AE-26600      EOS/AMSU-A Firmware Test Procedures

#### REPORTS

10353	EOS/AMSU-A Contamination Control Plan
10443	EOS/AMSU-A Software User's Guide (STE Software)
10458	EOS/AMSU-A Firmware Requirements
10974	EOS/AMSU-A Firmware Test Report

#### DRAWINGS

1338427	Cover, ESD Shielded Bag
1356008	EOS/AMSU-A1 Assembly
1356648	Cable Assembly, EOS Lab Test
1356655	Console Assembly, METSAT and EOS STE
SK1358702	9 Pin Breakout Box
SK1358704	25 Pin Breakout Box
SK1358705	37 Pin Breakout Box
SK1360106	ON/OFF Switch

(Copies of Aerojet documents may be obtained from Gencorp Aerojet, Azusa Operations, CAGE 70143, P.O. Box 296, Azusa, California, 91702-0296).

### 3. REQUIREMENTS

**3.1 Equipment.** All measurements shall be made using the test equipment or its equivalent as specified in Table I. Equivalent test equipment shall be approved by Systems Engineering and Quality Assurance. Test equipment and gauges required to perform examinations and tests shall be controlled by a calibration system as specified in MIL-STD-45662.

All inspection, measurement and test equipment used shall be currently calibrated to certified standards. The date of last calibration and calibration due date shall be displayed on each item of equipment subject to calibration and recorded at the time of test performance as specified in detailed procedures.

**3.2 Materials.** Not applicable.

**3.3 Required procedures and operations.** The unit shall be subjected to the tests shown in Figure 1 and Table II.

#### **3.3.1 Integration and test preliminary conditions**

**3.3.1.1 Limited performance test (LPT).** The Limited Performance Test shall consist of the test procedures in the LPT column of Table II.

**3.3.1.2 Comprehensive performance test (CPT).** Three types of Comprehensive Performance Testing are shown in Table II. The first and final CPTs are the same except for paragraph 3.3.5.1 which is performed during the first protoflight unit CPT. The first CPT is performed prior to the start of environmental testing. Sub CPTs are intermediate comprehensive performance tests performed during environmental testing. The final CPT is performed after the completion of environmental testing. Table II shows the required tests for each CPT.

**3.3.1.3 Integration and test facilities.** Unless otherwise specified, all testing and inspection of the EOS/AMSU-A1 shall be conducted at Aerojet, Azusa Operations, Azusa, California.

**3.3.1.4 Environment.** Unless otherwise specified all testing and inspection operations shall be performed under the following laboratory ambient conditions:

- a. Handling in accordance with AE-26357
- b. Contamination control in accordance with Report 10353
- c. Temperature:  $+23 \pm 10$  degrees Celsius
- d. Pressure: 610 to 810 torr
- e. Humidity:  $50 \pm 20\%$  (no condensation)
- f. The instrument shall be placed in its protective bag (1338427) when not in use.

**3.3.1.5 Integration testing/inspection.** Prior to the start of CPT/LPT testing, the unit should be in the final system configuration as determined by the successful completion of the subsystem integration procedure, AE-26156/7.

**3.3.1.6 Electrostatic discharge (ESD) certification.** Certification for handling ESD sensitive equipment in accordance with STD-2454 is required for all personnel working on the EOS/AMSU-A1 instrument.

**3.3.1.7 CPT/LPT preparation checklist.** Prior to starting the integration, perform the following procedures.

1. Visually inspect the instrument. Check for physical damage and cleanliness.
2. Verify proper installation of the ESD protective mat and wriststraps. Refer to STD-2454 for ESD protection instructions.

Table I. Required Test Equipment

Item	Qty	Equipment	Manufacturer	Model No,
1	1	9-Pin Breakout Box	Aerojet	SK1358702-1/ 2536-3743
2	1	25-Pin Breakout Box	Aerojet	SK1358704-1/ 2536-3746
3	1	37-Pin Breakout Box	Aerojet	SK1358705-1/ 2536-3745
4	1	AMSU-A Special Test Equipment (STE)	Aerojet	1356655-1
5	1	STE Interface Cable J1 (W31)	Aerojet	1356648-1
6	1	STE Interface Cable J2 (W32)	Aerojet	1356648-2
7	1	STE Interface Cable J3 (W33)	Aerojet	1356648-3
8	1	STE Interface Cable J4 (W34)	Aerojet	1356648-4
9	2	Liquid Nitrogen Container	Cole Parmer	N03726-20
10	1	Digital Multimeter	Fluke/Tektronix	77/DMM916
11	1	Spectrum Analyzer	Hewlett-Packard	8566B/8590L
12	1	Plotter	Hewlett-Packard	7475A
13	1	Digital Multimeter	Hewlett-Packard	34401A
14	1	Digital Oscilloscope	Tektronix	TDS386/2221A
15	1	Dynamic Signal Analyzer	Hewlett-Packard	3562A/3563
16	1	WR19 Harmonic Mixer (40-60 GHz)	Hewlett-Packard	HP11970V
17	1	WR19 Feedhorn	TRG	V861
18	1	Current Probe	Tektronix	AM503
19	1	Frequency Counter	Hewlett-Packard	5316A
20	1	Function Generator	Hewlett-Packard	3325A/B
21	1	Power Supply	Power Designs	3650-S
22	1	Frequency Synthesizer	Hewlett-Packard	83623A
23	1	Source Module/Multiplier	Hewlett-Packard	83557A
24	1	Source Module/Multiplier	Hewlett-Packard	83558A
25	1	Oxygen Monitor	Bio Systems	3100
26	2	CRYO Protective Gloves	Lab Safety Supply	5932L
27	1	Protective Face Mask	SELLSTROM	124-390/380
28	1	Cold Target Support	Aerojet	T-1291001-2
29	1	Cold Target Support	Aerojet	T-1291001-3
30	2	Cold Target	Aerojet	T-1291000-1
31	1	ON/OFF Switch	Aerojet	SK1260106
32	1	Power Supply	Hewlett-Packard	HP 6205 B
33	1	Protective Apron	Lab Safety Supply	8A-7549-3

Table II. AMSU-A1 Performance Tests

Para.	Description	1 <sup>st</sup> CPT	LPT	Sub CPT	Final CPT
3.3.2	Grounding Interface Test	X	X	X	X
3.3.3	Operational Power Interface Test				
3.3.3.1	Quiet Power Bus				
3.3.3.1.1	Quiet Power Bus Operational Power Test	X		X	X
3.3.3.1.2	Quiet Power Bus Operational Power Test (LPT Only)		X		
3.3.3.1.3	Quiet Power Bus Turn On Transient Test	X			X
3.3.3.2	Noisy Power Bus				
3.3.3.2.1	Noisy Power Bus Operational Power Test	X		X	X
3.3.3.2.2	Noisy Power Bus Turn On Transient Test	X			X
3.3.3.3	Survival Heater Power Bus Interface Test				X
3.3.4	Passive Analog Interface Test	X	X	X	X
3.3.5	Command & Telemetry Bus Interface Test				
3.3.5.1	FQT of the EOS/AMSU-A1 Firmware (PFM Only)	X			
3.3.5.2	Instrument Commanding Verification	X	X	X	X
3.3.5.3	Science and Engineering Data Verification	X	X	X	X
3.3.5.4	1553 Bus Interface Test	X			X
3.3.6	Test Point Interface Test				
3.3.6.1	Intentionally Left Blank				
3.3.6.2	8 Second Sync Pulse Verification	X		X	X
3.3.6.3	Integrate/Hold & Dump Signal Verification	X		X	X
3.3.6.4	Radiometer Channel Analog Output Verification	X		X	X
3.3.6.5	PLO #1 and PLO #2 Lock Signal Verification	X		X	X
3.3.6.6	GSE-1 Mode Verification	X			X
3.3.6.7	GSE-2 Mode Verification	X			X
3.3.6.8	GSE-3 Mode Verification	X			X
3.3.6.9	GSE-4 Mode Verification	X			X
3.3.6.10	GSE-5 Mode Verification	X			X
3.3.6.11	GSE-7 Mode Verification	X			X
3.3.7	Radiometer Functional Performance Test				
3.3.7.1	PLO Frequency Measurements	X			X
3.3.7.2	Relative Radiometer NE $\Delta$ T Measurements	X	X	X	X
3.3.8	Channel Identification Test	X			

3. Verify that each connector of the spacecraft interface has a connector saver installed.
4. Obtain the required test equipment listed in Table I. Verify that the test equipment requiring calibration is currently calibrated.
5. Verify operation of the Special Test Equipment (STE) shown in Figure 2 by itself. Ensure that the current limits on the two power supplies that interface to the instrument are set correctly. The Q supply should be set to 3 amps and the N/S supply should be set to 1.5 amps. Refer to Figure 3 for the STE power supply panel layout. Figures 4 through 6 show other panels on the STE that will be referenced later in this procedure.
6. Verify that all of the required procedures and drawings listed in 2.2.2 are available for reference.

**3.3.2 Grounding interface test.** This test provides the verification of the unit grounding requirements found in the following documents:

UIID	Waiver 5 (12)
GIRD	Sections 5.3 and 6.2.2 (except section 5.3.5.2)
POS	Section 4.4.1
ICD	Section 5.3

To verify these requirements, perform the following procedures.

1. Configure the unit as shown in Figure 7. Verify that connectors J1, J2, J3 and J4 have connector savers installed. Connect a 25 Pin breakout box at J1. Connect a 37 Pin breakout box at J2. Connect a 9 pin breakout box at J3. Connect a 37 pin breakout box at J4.
2. Measure and record continuity or isolation between the points as specified on Test Data Sheet (TDS) 1.
3. Remove the breakout boxes from J2 and J3 ensuring that the connector savers remain in place.

**3.3.3 Operational power interface test.** This test provides the verification of the operational power interface requirements found in the following documents:

UIID	- Section 3.3 and waivers 5(3), 5(7), 5(9), and 5(11)
GIRD	- Sections 5.1.2 and 5.2
POS	- None
ICD	- Sections 5.1.2 and 5.2

Operational power is delivered to the unit through spacecraft interface connector J1 as follows:

1. Quiet power bus (3.3.3.1)
2. Noisy power bus (3.3.3.2)
3. Survival heater power bus (3.3.3.3)

**3.3.3.1 Quiet power bus interface tests.** The quiet bus is active immediately upon the introduction of spacecraft power to the bus. There is no internal control within the unit. The quiet power bus shall be verified by performing the following tests:

1. Quiet power bus operational power test (3.3.3.1.1)
2. Quiet power bus operational power test (LPT only) (3.3.3.1.2)
3. Quiet power bus turn on transient test (3.3.3.1.3).

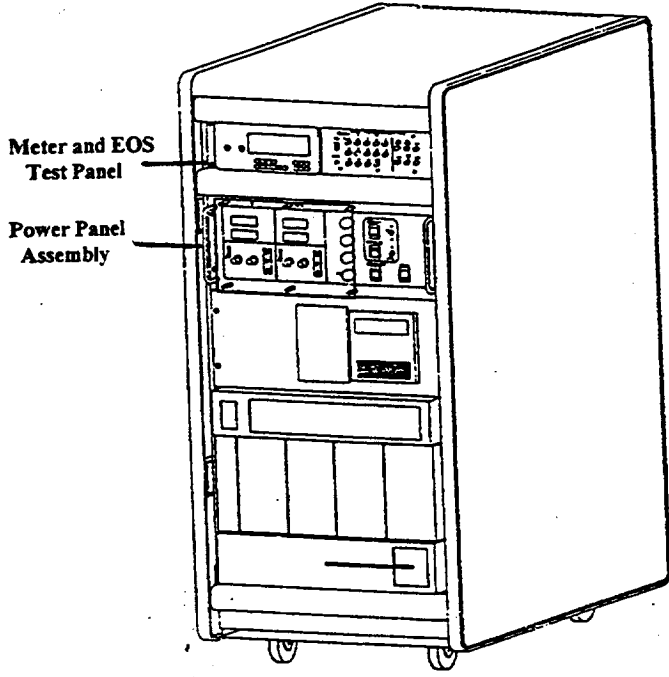


Figure 2. Special Test Equipment (STE ) (1356655)

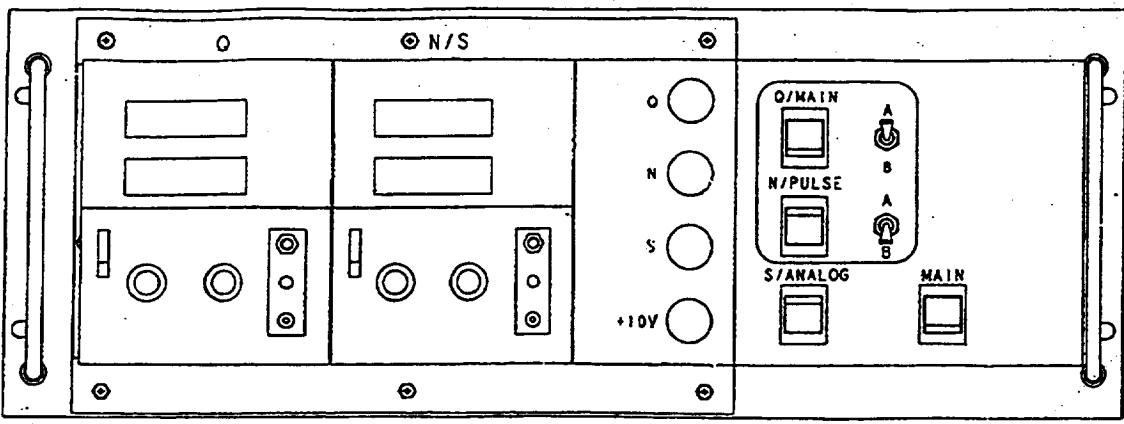


Figure 3. STE Front Power Supply Panel Layout

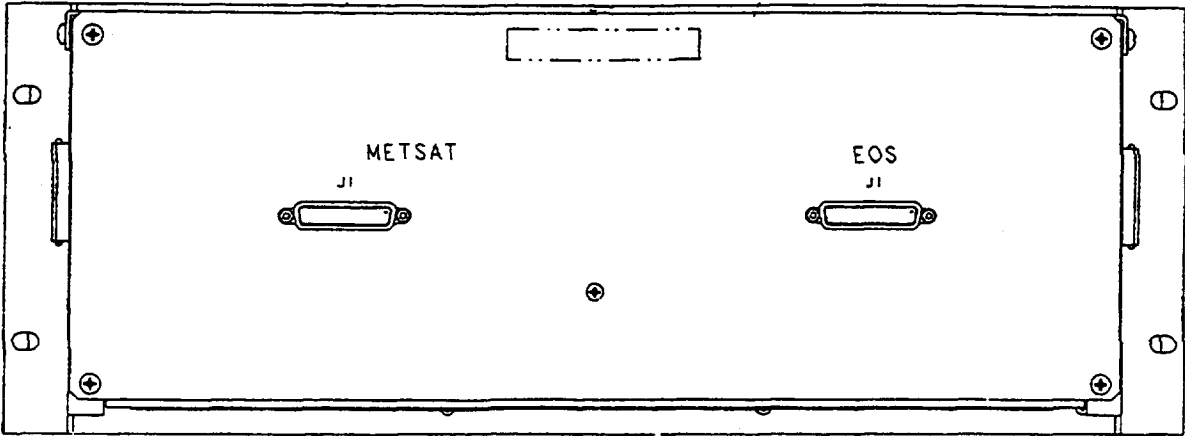


Figure 4. STE Rear Power Supply Panel Layout

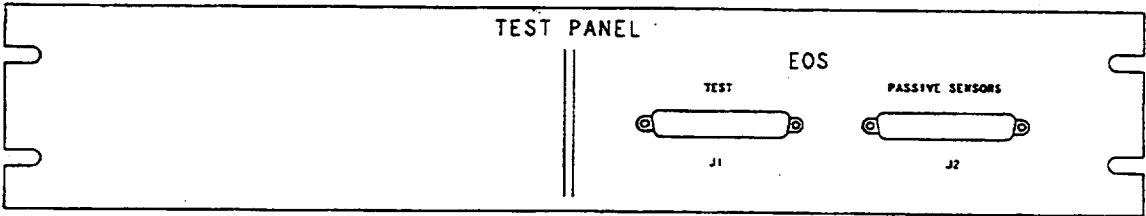


Figure 5. STE Rear Test Panel Layout

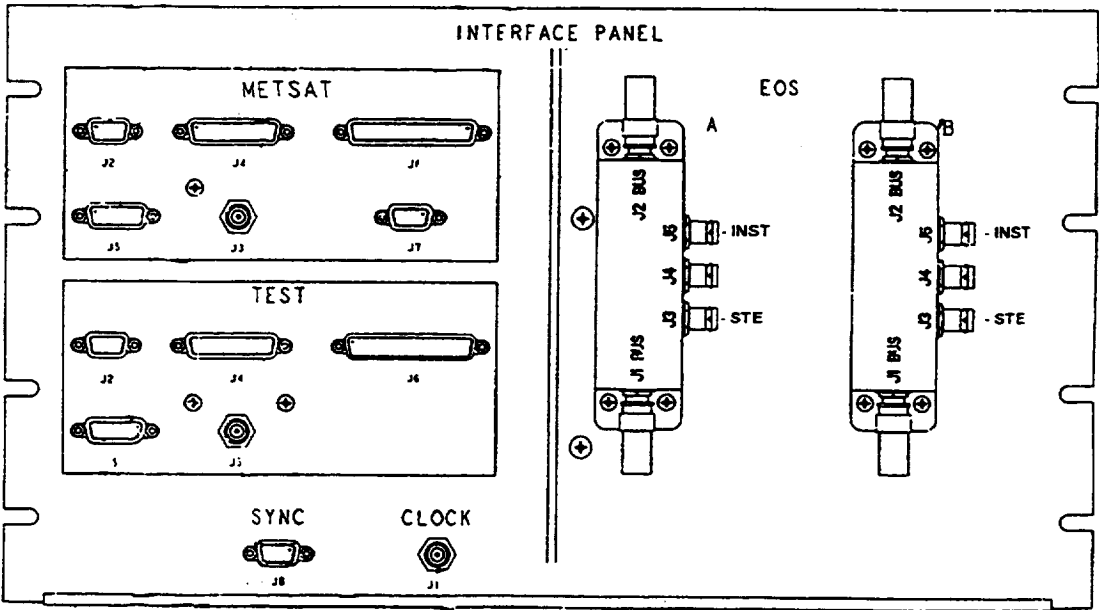


Figure 6. STE Rear Interface Panel Layout



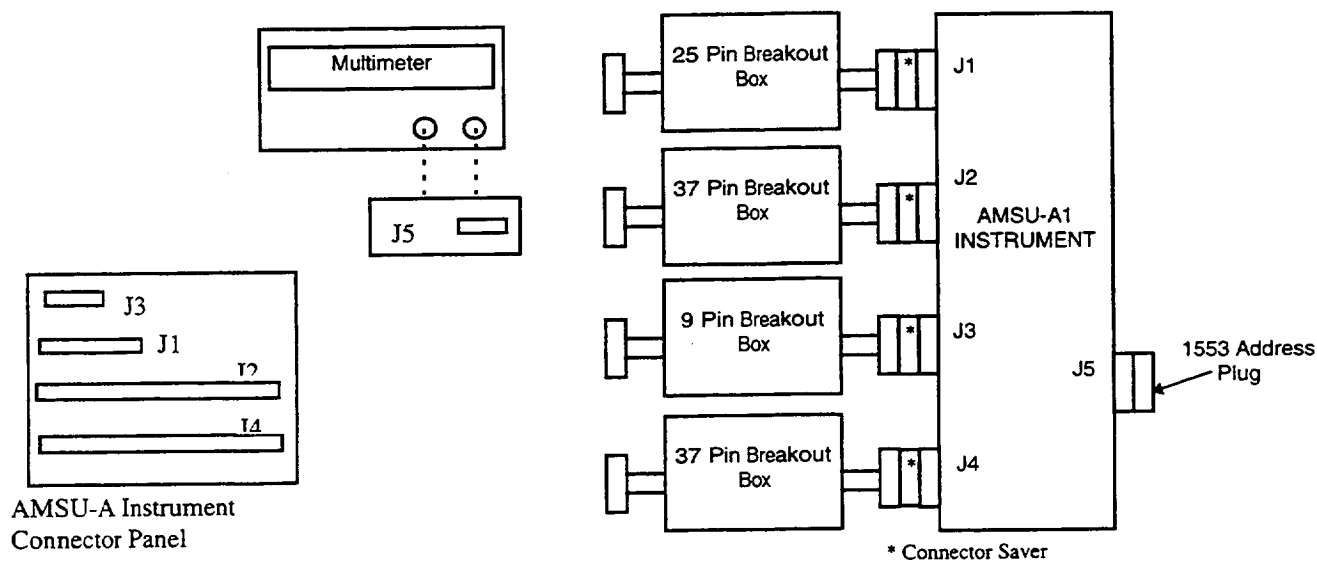


Figure 7. Setup for Grounding Interface Test

**3.3.3.1.1 Quiet power bus operational power test.** The Quiet Power Bus operational power shall be verified at combinations of three voltages (+27, +29, and +31 volts) and two PLO conditions (PLO #1 active and PLO #2 active). The operational power test will be conducted for the unit in full scan mode as follows:

1. With the STE main power off and the STE power panel turned off (MAIN POWER, Q/MAIN, N/PULSE, and S/ANALOG switches as shown in Figure 3 in the OFF position), connect the instrument as shown in Figure 8. This setup assumes a dc impedance from the spacecraft supplied power through fuse and cabling to the unit on the order of 0.3 ohms.
2. Ensure breakout boxes at J1 and J4 are connected to the unit as indicated in 3.3.2, testing.
3. Connect the STE to the instrument using the following STE interface cables:
  - a. STE interface cable J1 (1356648-1)
  - b. STE interface cable J2 (1356648-2)
  - c. STE interface cable J3 (1356648-3)
4. Connect STE interface cable J1 from EOS J1 found on the STE power panel shown in Figure 4 to the 25 pin breakout box. Connect the remaining end to the 25 pin breakout box to J1 of the instrument.
5. Connect STE interface cable J2 from EOS J2 found on the STE test panel shown in Figure 5 to J2 on the unit.
6. Connect STE interface cable J3 from EOS A&B J5 found on the STE interface panel shown in Figure 6 to J3 on the unit.
7. Before turning on the power to the unit, verify that switches 1, 2, 14, and 15 of the 25 pin breakout box are in the open position.

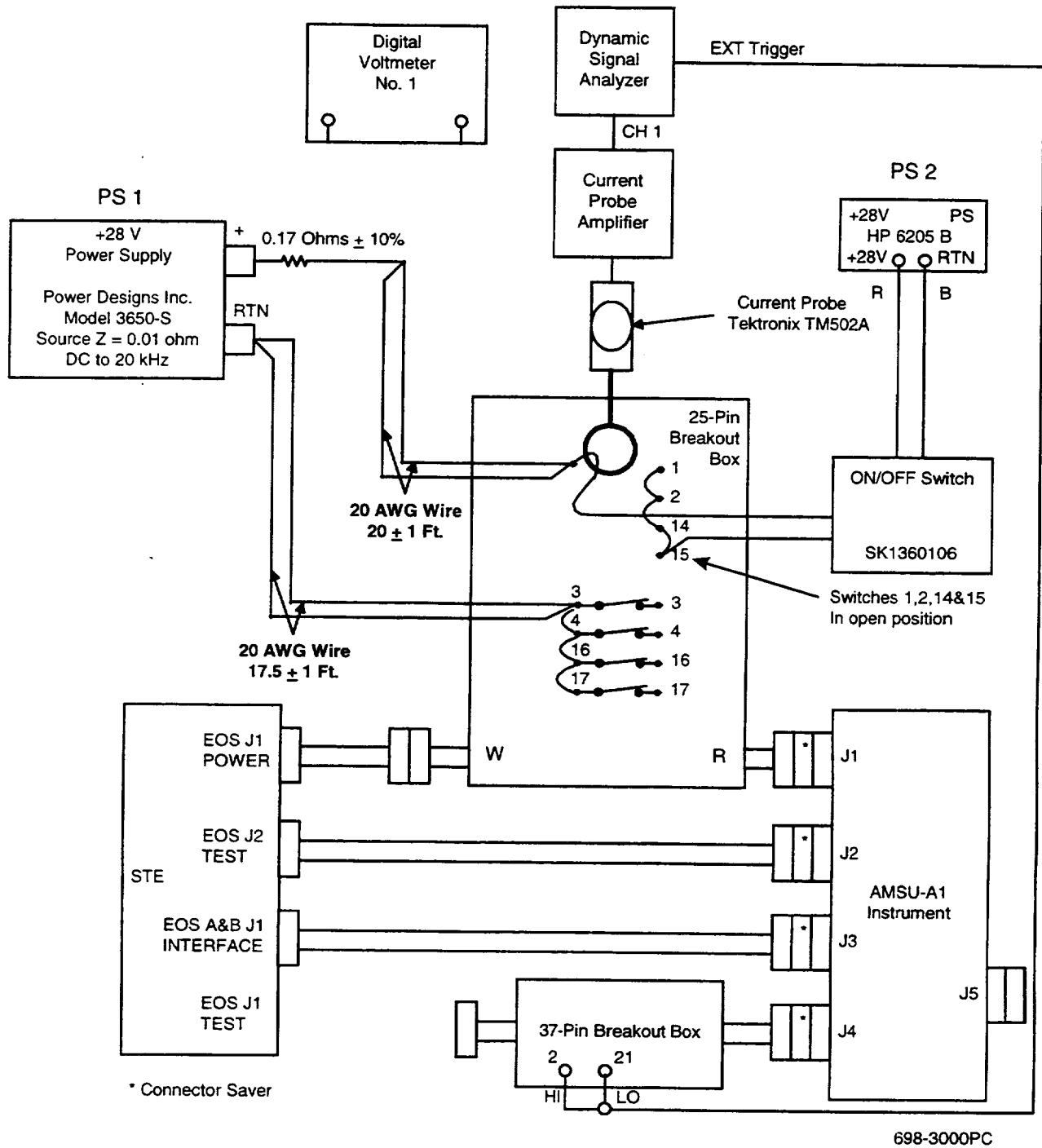


Figure 8. Setup for Quiet Bus Operational Power Tests

8. Disconnect the external power supply PS1 from the 25 pin breakout box. Turn on the external supply and using a multimeter, adjust its output to  $27 \pm 0.10$  volts. Turn off the external supply and reconnect the supply as shown in Figure 8.
9. Turn the STE MAIN POWER switch ON (refer to Figures 2 and 3 (computer should be on, STE power panel should be off)). From the A1 directory and at the "\$" prompt, enter the command to the STE "RUN E1". The EOS/AMSU-A1 software program should be running as evidenced by the STE screen shown in Figure 9.
10. Turn the STE power supply panel MAIN POWER switch ON (refer to Figure 3).
11. Turn the external power supply on. Place ON/OFF switch in the 'ON' position. With a multimeter, adjust the Quiet Bus voltage at the breakout box to  $27 \pm 0.10$  volts (between J1-1 and J1-3).
12. Turn the STE power supply panel N/Pulse switch on (refer to Figure 3). With a multimeter, adjust the Noisy Bus voltage at the breakout box to  $29 \pm 0.10$  volts (between J1-5 and J1-7).
13. Go to the Commands screen on the STE. From the main screen shown in Figure 9, enter the STE command "[ 2 ] MONITOR ONLY". The screen should now be as shown in Figure 10. Enter the STE command "[ 14 ] COMMANDS". The screen should now be as shown in Figure 11.
14. Enter the STE command "[ 11 ] ANTENNA FULL SCAN MODE". Wait 18 seconds before issuing the next command.
15. Enter the STE command "[ 9 ] SCANNER A1-1 POWER". Wait 18 seconds before issuing the next command.
16. Enter the STE command "[ 10 ] SCANNER A1-2 POWER". Wait 18 seconds before issuing the next command. The unit should now be scanning in full scan mode with PLO #1 active.
17. Look at the Quiet Bus voltage. If necessary, using the multimeter adjust the external supply PS1 to  $27 \pm 0.10$  volts. Record the voltage on TDS 2.
18. Observe the Quiet Bus current waveform on the dynamic signal analyzer. Configure the dynamic signal analyzer as follows:

Select **MEAS MODE**  
    Select *Time Capture*  
    Select *Capture Select*  
    Select *Capture Length*; Enter 1.0, Select *Record*  
Select **FREQ**  
    Select *Freq Span*; Enter 100.0; Select *Hz*  
    Select *E SMPL Off*  
    Select *Time Length*; Enter 8.0; Select *Sec*  
Select **SELECT MEAS**  
    Select *Power Spec*  
    Select *CH1 Active*  
Select **WINDOW**  
    Select *Hann*  
Select **SOURCE**  
    Select *Source Off*  
Select **AVG**  
    Select *Avg Off*  
    Select *Tim Av Off*  
Select **RANGE**  
    Select *Aut 1 up&down*

EOS/AMSU-A1 WHAT TYPE OF TEST?	
[ 2 ] MONITOR ONLY	[ 13 ] FUNCTIONAL TEST
[ 3 ] WARM PATH CALIBRATION	[ 14 ] S/C TARGET TEST
[ 4 ] CYCLE 1 CALIBRATION	[ 15 ] ARCHIVE
[ 5 ] CYCLE 2 CALIBRATION	[ 16 ] INIT AZONIX
[ 6 ] CYCLE 3 CALIBRATION	
[ 7 ] SPECIAL CYCLE CALIBRATION	[ 10 ] SELF TEST
[ 8 ] DISK/TAPE PLAYBACK	[ 11 ] ID NUMBER XX
[ 9 ] ERROR MESSAGES	OFF [   ] POWER
	[ 1 ] RETURN
SELECT BUTTON	

Figure 9. EOS/AMSU-A1 STE Main Screen

EOS A1 - XX OB.A1] E1.		29-SEP-97 14:44:25 SCAN NUMBER	
[ 5 ] SCIENCE DATA	ELEMENT	0000	
[ 6 ] CONTROL/STATUS	ELEMENT	00	
[ 7 ] ENGINEERING	ELEMENT	00	
[ 8 ] DELTA T	BLOCK MONITOR DATA SELECT		
[ 9 ] CALIBRATION TEST EQUIPMENT	ERROR MESSAGES [ 15 ]		
[ 10 ] SCIENCE DATA			
[ 11 ] INSTRUMENT STATUS			
[ 12 ] UNPOWERED THERMISTORS			
[ 13 ] ENGINEERING DATA			
[ 14 ] COMMANDS			
POWER ON	CHECKSUM IN	CALC	SA28 SA29
SCREEN ONLY [ 2 ]	PRINT [ 3 ]	FULL	[ 1 ] RETURN
SELECT BUTTON			

Figure 10. EOS/AMSU-A1 STE Monitor Only Screen

EOS A1-XX OB.A1] E1.				29-SEP-97 14:44:25 SCAN NUMBER	
[ 5 ]	SCIENCE DATA	ELEMENT	0000		
[ 6 ]	CONTROL/STATUS	ELEMENT	00		
[ 7 ]	ENGINEERING	ELEMENT	00		
COMMANDS			PLLO POWER	PLLO#2	[ 15 ]
[ 9 ]	SCANNER A1-1 POWER	= OFF	COLD CAL POSITION 1	YES	[ 16 ]
[ 10 ]	SCANNER A1-2 POWER	= OFF	2	NO	[ 17 ]
[ 11 ]	JANTENNA FULL SCAN MODE = NO		3	NO	[ 18 ]
[ 12 ]	WARM CAL	= NO	COLD CAL POSITION 4	NO	[ 19 ]
[ 13 ]	COLD CAL	= NO	RESET C&DH PROCESSOR		[ 20 ]
[ 14 ]	NADIR	= NO	GSE MODE		[ 21 ]
ENGR OK POWER ON		CHECKSUM IN	CALC	SA28	SA29
SCREEN ONLY [ 2 ]		PRINT [ 3 ]	FULL	[ 1 ]	RETURN
SELECT BUTTON					

Figure 11. EOS/AMSU-A1 STE Commands Screen

Select **INPUT COUPLE**  
     Select CH1 DC  
     Select CH 1 Ground  
 Select **SELECT TRIG**  
     Select Trig Level; Enter 1.5; Select V  
     Select Arm AU  
     Select Ext  
     Select Slope +  
 Select **TRIG DELAY**  
     Enter 0.0; Select Sec  
 Select **COORD**  
     Select Real  
 Select **VIEW INPUT**  
     Select Time Buff  
 Select **SCALE**  
     Select X Fixd Scale; Enter 0.0, 8.0; Select Sec  
     Select Y Fixd Scale; Enter -10.0, 70.0; Select mv  
 Select **UNITS**  
     Select Hz (sec)

#### NOTE

Prior to collecting any current data, the current meter and DSA have to be "zeroed out"; zero current reference has to be established on the DSA. Follow this interim procedure to zero reference the current meter and DSA.

- a. Remove the current probe from the circuit and close the probe. Place the probe in a magnetic benign location.
- b. Depress "Start Capture" on the DSA.
- c. With the "capture in process", adjust the "output DC level" control on the current amplifier to indicate zero current on the DSA.
- d. Position the current probe to its original location in accordance with Figure 8.

The instrument is now ready to capture and plot 8.0 seconds of data

19. Start the DSA signal capture by depressing "Start Capture"; Insure Relay Board is 'ON'.
20. Obtain a record of the Quiet Bus current waveform. On the Relay Board, turn the switch OFF.
21. Determine average power by the following:  
  
Observe the current waveform on the DSA. Using the Y markers, place the lower horizontal bar on the 0.0 ma line and the upper bar on the current trace, adjusting the bar to the middle of the signal. This measures the average current over the 8.0 second span. Multiply this value by the current scale factor (20 ma/mv, which yields Average Quiet Bus Current. Record on TDS 2, Record the PS-1 measured Quiet Bus Voltage on TDS 2. Multiply the voltage times the current for the calculated average power. Record on TDS 2.
22. Determine peak power by the following:  
  
Observe the current wave form taken above. Sweep the X marker across the current wave form stopping on each narrow spike to see which has the highest amplitude. Upon finding the largest one, leave the X marker indicating the Peak Current Amplitude. Record this on TDS 2. Make a plot of this screen and attach it to TDS 2. Record the PS-1 measured Quiet Bus Voltage on TDS 2. Multiply the voltage times the peak current to obtain the calculated Peak Power. Record this on TDS 2.
23. With the multimeter, adjust the external power supply PS1 to  $29 \pm 0.10$  vdc as measured between J1-1 (high) and J1-2 (low). Record this voltage on TDS 2.
24. Repeat steps 19 through 22.
25. With the multimeter, adjust the external power supply PS1 to  $31 \pm 0.10$  vdc as measured between J1-1 (high) and J1-2 (low). Record this voltage on TDS 2.
26. Repeat steps 19 through 22.
27. Repeat the above steps after changing to PLO #Z.

#### 3.3.3.1.2 *Quiet power bus operational power test (LPT only).*

1. Configure the unit as shown in Figure 12.

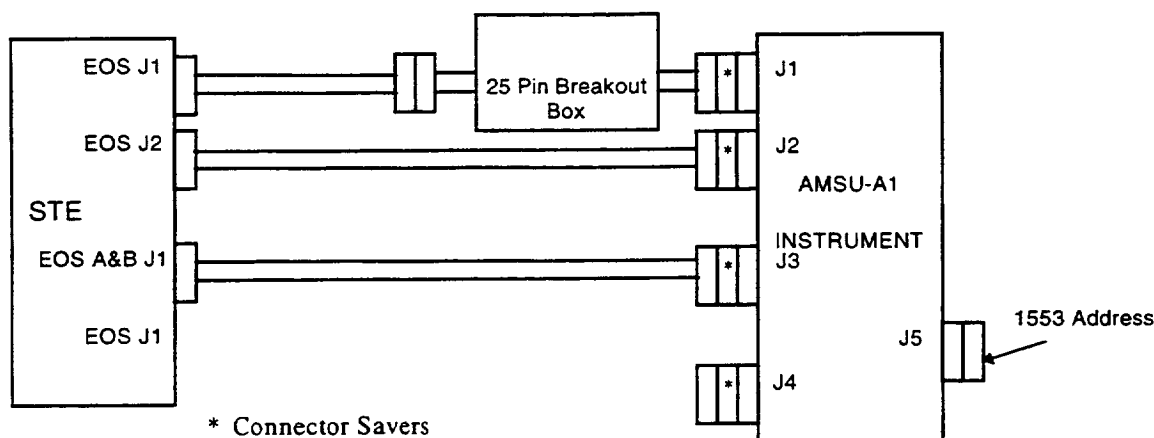


Figure 12. Test Setup of Unit Connected to STE

2. Breakout box at J1 should still be connected to the unit from the grounding interface testing of paragraph 3.3.2.
3. Connect the STE to the instrument using the following STE interface cables:
  - a. STE interface cable J1 (1356648-1)
  - b. STE interface cable J2 (1356648-2)
  - c. STE interface cable J3 (1356648-3)
4. Connect STE interface cable J1 from EOS J1 found on the STE power panel shown in Figure 4 to the remaining end of the 25 pin breakout box connected to J1 on the unit.
5. Connect STE interface cable J2 from EOS J2 found on the STE test panel shown in Figure 5 to J2 on the unit.
6. Connect STE interface cable J3 from EOS A&B J5 found on the STE interface panel shown in Figure 6 to J3 on the unit.
7. Turn the STE main power switch on (refer to Figures 2 and 3 (computer should be on, STE power panel should be off)). From the A1 directory and at the "\$" prompt, enter the command to the STE "RUN E1". The EOS/AMSU-A1 software program should be running as evidenced by the STE screen shown in Figure 9.
8. Turn the STE power supply panel main power switch on (refer to Figure 3).
9. Turn the STE power supply panel Q/Main switch on (refer to Figure 3). With a multimeter adjust the Quiet Bus voltage at the breakout box to  $29 \pm 0.10$  volts (between J1-1 and J1-3).
10. Turn the STE power supply panel N/Pulse switch on (refer to Figure 3). With a multimeter adjust the Noisy Bus voltage at the breakout box to  $29 \pm 0.10$  volts (between J1-5 and J1-7).
11. Go to the Commands screen on the STE. From the main screen shown in Figure 9, enter the STE command "[ 2 ] MONITOR ONLY". The screen should now be as shown in Figure 10. Enter the STE command "[ 14 ] COMMANDS". The screen should now be as shown in Figure 11.

12. Enter the STE command "[ 11 ] ANTENNA FULL SCAN MODE". Wait 18 seconds before issuing the next command.
13. Enter the STE command "[ 9 ] SCANNER A1-1 POWER". Wait 18 seconds before issuing the next command.
14. Enter the STE command "[ 10 ] SCANNER A1-2 POWER". Wait 18 seconds before issuing the next command.
15. Look at the Quiet Bus voltage. If necessary, using the multimeter adjust the external supply to  $29 \pm 0.05$  volts. Record the voltage and current on TDS 3. The current is read directly from the Q/Main power supply panel meter.
16. Compute the operating power in watts on TDS 3 using the equation provided on TDS 3.
17. Turn the STE power supply panel N/Pulse switch off (refer to Figure 3).
18. Turn the STE power supply panel Q/Main switch off (refer to Figure 3).
19. Turn the STE power supply panel main power switch off (refer to Figure 3).
20. Leave the setup intact for paragraph 3.3.4 testing.

**3.3.3.1.3 Quiet power bus turn on transient test.** The Quiet Power Bus turn on transient shall be verified at +31 volts as follows:

1. The setup should be intact from paragraph 3.3.3.1.1 testing
2. Verify the external power supply (PS1) is adjusted to  $31 \pm .1$  vdc, make appropriate adjustments.
3. Configure the Dynamic Signal Analyzer (DSA) as follows:

Select **MEAS MODE**  
     Select *Time Capture*  
     Select *Capture Select*  
     Select *Capture Length*; Enter 400.0; Select *msec*  
 Select **FREQ**  
     Select *Freq Span*; Enter 100.0; Select *KHz*  
     Select *E SMPL Off*  
     Select *Time Length*; Enter 400.0; Select *msec*  
 Select **SELECT MEAS**  
     Select *Power Spec*  
     Select *CH1 Active*  
 Select **WINDOW**  
     Select *Hann*  
 Select **SOURCE**  
     Select *Source Off*  
 Select **AVG**  
     Select *Avg Off*  
     Select *Tim Av Off*  
 Select **RANGE**  
     Select *Chan 1 Range*; Enter 1; Select *V*  
 Select **INPUT COUPLE**  
     Select *CH1 DC*  
     Select *CH 1 Ground*



Select **INPUT TRIG**  
Select *Trig Level*; Enter 100; Select *mv*  
Select *Arm AU*  
Select *Chan 1 Input*  
Select *Ext*  
Select *Slope +*  
Select **TRIG DELAY**  
Enter 0.0; Select *Sec*  
Select **COORD**  
Select *Real*  
Select **VIEW INPUT**  
Select *Time Buff*  
Select **SCALE**  
Select *X Fixd Scale*; Enter 0.0, 400.0; Select *msec*  
Select *Y Fixd Scale*; Enter -10.0, 320.0; Select *mv*  
Select **UNITS**  
Select *Hz (sec)*

#### NOTE

Prior to collecting any current data, the current meter and DSA have to be "zeroed out"; zero current reference has to be established on the DSA. Follow this interim procedure to zero reference the current meter and DSA.

- a. Remove the current probe from the circuit and close the probe. Place the probe in a magnetic benign location.
  - b. Depress "Start Capture" on the DSA.
  - c. With the "capture in process", adjust the "output DC level" control on the current amplifier to indicate zero current on the DSA.
  - d. Position the current probe to its original location in accordance with Figure 8.
4. Adjust PS2 for +28vdc.
  5. Start the DSA signal capture by depressing "Start Capture"; wait for the DSA message "waiting for trigger" before proceeding.
  6. On the Relay Board, turn the switch ON and obtain a record of the Quiet Bus Turn on current waveform. On the Relay Board, turn the switch OFF. Adjust the display time base and voltage sensitivity to allow for adequate current and pulse duration measurements. Plot the obtained waveform and attach a hard copy of the scan to TDS 4. See Figures 13 and Figure 14.
  7. Measure the Turn On pulse width; record this value in TDS 4.
  8. Compute the peak current as follows:

Multiply the maximum Ya value by the current/ div as selected on the current amplifier. As an example: if the current amplifier is set up to display 200 ma/ 10 mv per division, and the maximum Ya value = 276mv:

$$276\text{mv} \times (200\text{ma}/ 10\text{mv}) = 5520\text{ma} = 5.52 \text{ amps}$$

Record this value on TDS 4.

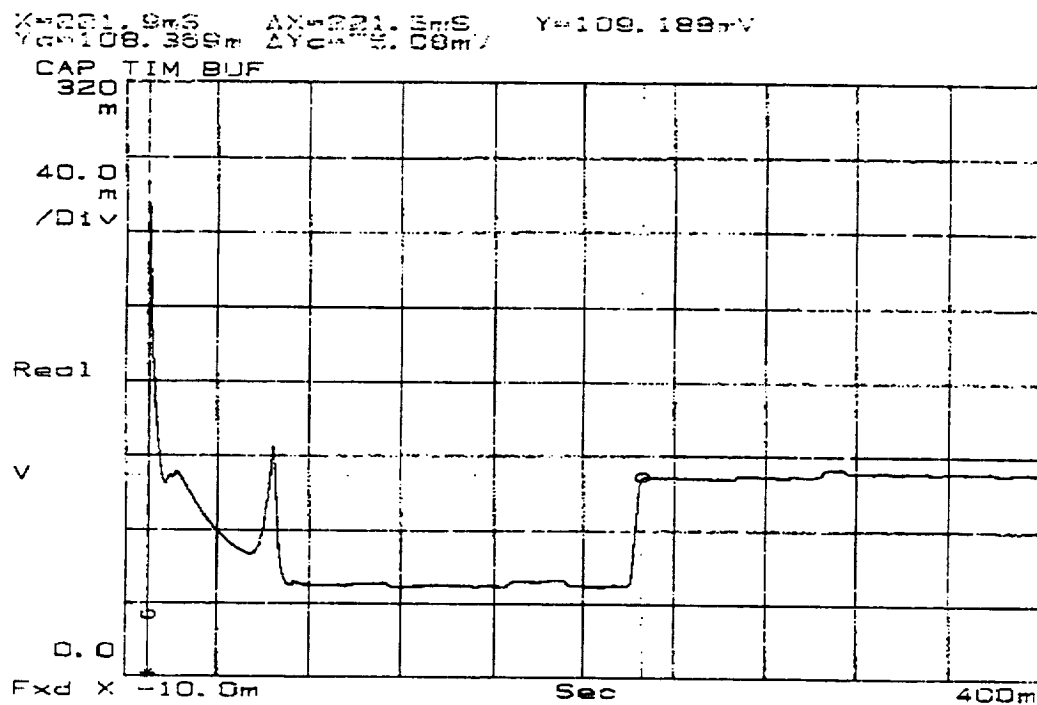


Figure 13. Typical Quiet Bus Turn On Transient

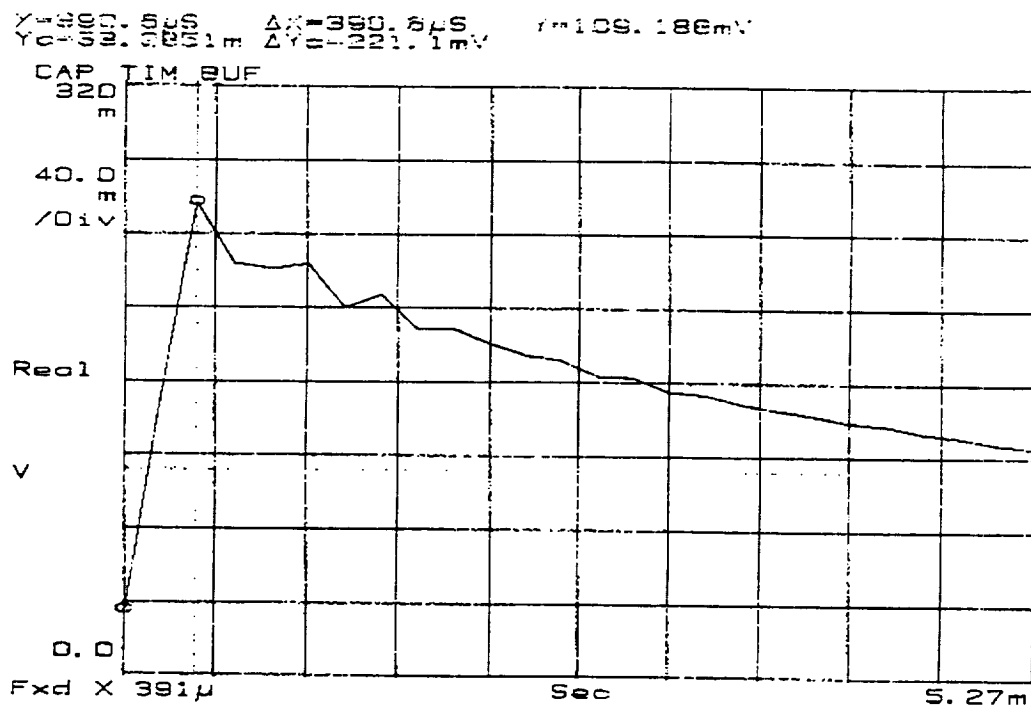


Figure 14. Typical Quiet Bus Turn On Expanded

9. The 1st derivative of the current waveform must be calculated. Compute the  $dI/dT$  as follows:

The most probable location of the greatest current demand is during the first positive transition after voltage application. If this is the case, expand that segment of the display and measure the greatest voltage transition in the smallest time transition. The change in voltage times the current/ div as selected on the current amplifier produces the change in current. Next divide this change in current by the change in time (in microseconds). This value is  $dI/dT$ . Example:

Change in voltage .....144 mv  
Change in time (microseconds) .....19.5 us  
Current/ div on current amp .....200ma/ 10mv

$$144\text{mv} \times (200\text{ma}/ 10\text{mv})/ 19.5 \text{ us} = 147.7\text{ma per us}$$

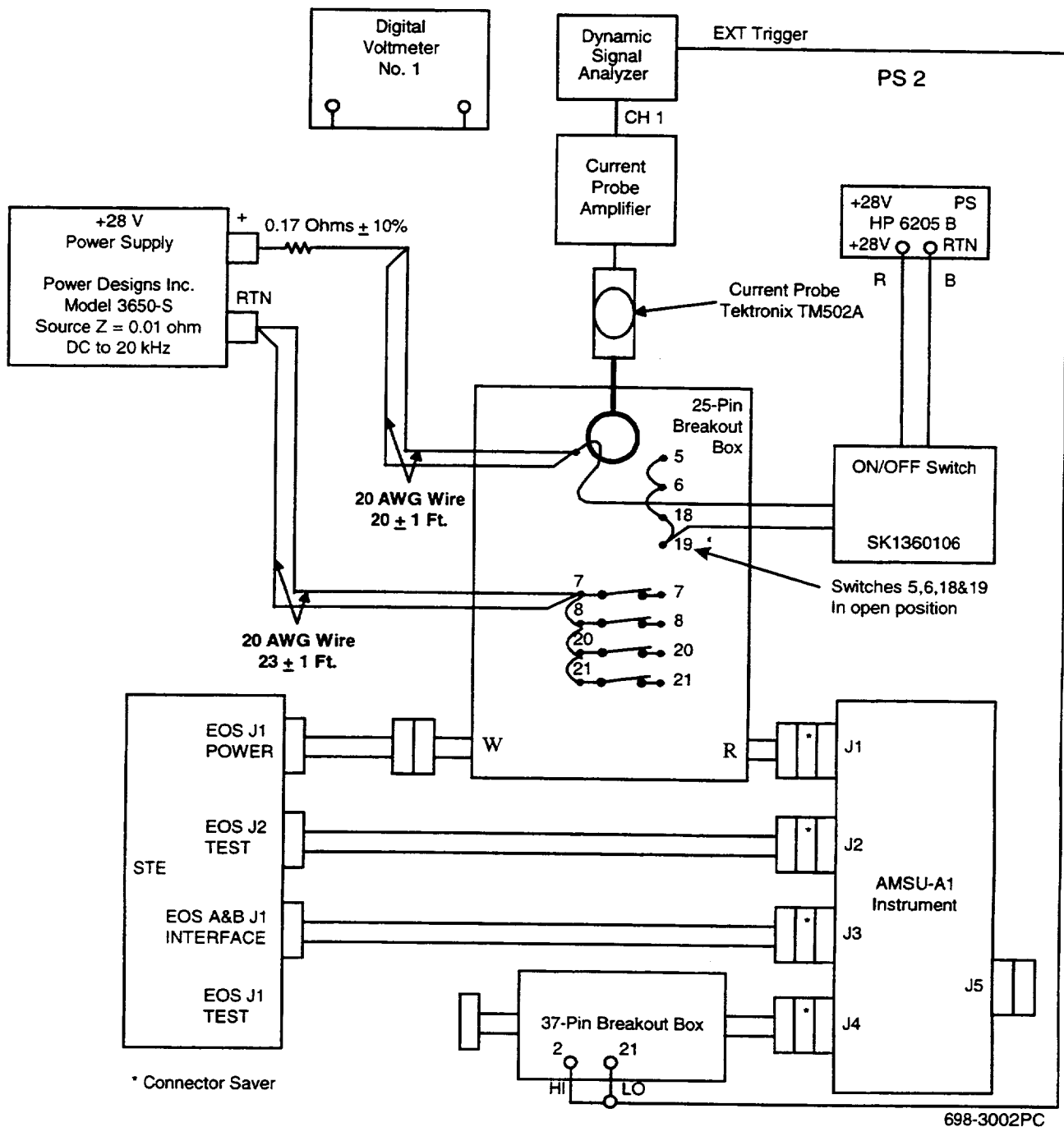
10. Record the computed value on TDS 4.
11. With the multimeter, adjust the external power supply PS1 to  $29 \pm 0.10\text{vdc}$  as measured between J1-1 (high) and J1-3 (low).
12. Repeat steps 3 through 10.
13. With the multimeter, adjust the external power supply PS1 to  $27 \pm 0.10\text{vdc}$  as measured between J1-1 (high) and J1-3 (low).
14. Repeat steps 3 through 10.
15. Turn the STE power supply panel N/ pulse switch OFF (refer to Figure 3).
16. Turn the STE power supply panel main power switch OFF (refer to Figure 3).

**3.3.3.2 Noisy power bus interface tests.** The noisy bus is not active upon the introduction of spacecraft power to the bus. Two relays, one for the A1-1 scan drive and one for the A1-2 scan drive, must be turned on before the noisy bus is active within the unit. During normal turn on operation, each scan drive relay is enabled separately a minimum of eighteen seconds apart. Similarly, during normal shut down each drive system is disabled separately. The noisy bus shall be verified by performing the following tests:

1. Noisy power bus operational power test (3.3.3.2.1)
2. Noisy power bus turn-on transient test (3.3.3.2.2)

**3.3.3.2.1 Noisy power bus operational power test.** The Noisy Power Bus operational power shall be verified at combinations of three voltages (+27, +29, and +31 volts). The operational power test will be conducted for the unit in full scan mode as follows:

1. With the STE main power off and the STE power panel turned off (MAIN POWER, Q/MAIN, N/PULSE, and S/ANALOG switches as shown in Figure 3 in the OFF position), connect the instrument as shown in Figure 15. This setup assumes a dc impedance from the spacecraft supplied power through fuse and cabling to the unit on the order of 0.3 ohms.
2. Before turning on the power to the unit, verify that switches 5, 6, 18, and 19 of the 25 pin breakout box are in the open position.
3. Disconnect the external power supply from the 25 pin breakout box. Turn on the external supply PS1 and using a multimeter, adjust its output to  $27 \pm 0.05$  volts. Turn off the external supply and reconnect the supply as shown in Figure 15.



4. Turn the STE main power switch on (refer to Figures 2 and 3 (computer should be on, STE power panel should be off)). From the A1 directory and at the "\$" prompt, enter the command to the STE "RUN E1". The EOS/AMSU-A1 software program should be running as evidenced by the STE screen shown in Figure 9.
5. Turn the STE power supply panel main power switch on (refer to Figure 3).
6. Turn the STE power supply panel Q/MAIN switch on (refer to Figure 3). With a multimeter, adjust the Quiet Bus voltage at the breakout box to  $29 \pm 0.05$  volts (between J1-1 and J1-3).

7. Turn the external power supply PS1 on. Place ON/OFF switch in the 'ON' position. With a multimeter, adjust the Noisy Bus voltage at the breakout box to  $27 \pm 0.05$  volts (between J1-5 and J1-7).
8. Go to the Commands screen on the STE. From the main screen shown in Figure 9, enter the STE command "[ 2 ] MONITOR ONLY". The screen should now be as shown in Figure 10. Enter the STE command "[ 14 ] COMMANDS". The screen should now be as shown in Figure 11.
9. Enter the STE command "[ 11 ] ANTENNA FULL SCAN MODE". Wait 18 seconds before issuing the next command.
10. Enter the STE command "[ 9 ] SCANNER A1-1 POWER". Wait 18 seconds before issuing the next command.
11. Enter the STE command "[ 10 ] SCANNER A1-2 POWER". Wait 18 seconds before issuing the next command. The unit should now be scanning in full scan mode with PLO #1 active.
12. Look at the Noisy Bus voltage. If necessary, using the multimeter, adjust the external supply to  $27 \pm 0.10$  volts. Record the voltage on TDS 5.
13. Observe the Noisy Bus current waveform on the dynamic signal analyzer. Configure the dynamic signal analyzer as follows:

Select **MEAS MODE**

Select *Time Capture*

Select *Capture Select*

Select *Capture Length*; Enter 1.0; Select *Record*

Select **FREQ**

Select *Freq Span*; Enter 100.0; Select *Hz*

Select *E SMPL Off*

Select *Time Length*; Enter 8.0; Select *Sec*

Select **SELECT MEAS**

Select *Power Spec*

Select *CH1 Active*

Select **WINDOW**

Select *Hann*

Select **SOURCE**

Select *Source Off*

Select **AVG**

Select *Avg Off*

Select *Tim Av Off*

Select **RANGE**

Select *Aut 1 up&down*

Select **INPUT COUPLE**

Select *CH1 DC*

Select *CH 1 Ground*

Select **SELECT TRIG**

Select *Trig Level*; Enter 1.5; Select *V*

Select *Arm AU*

Select *Ext*

Select *Slope +*

Select **TRIG DELAY**

Enter 0.0; Select *Sec*

Select **COORD**

Select *Real*

Select **VIEW INPUT**

Select *Time Buff*

Select **SCALE**

Select *X Fixd Scale*; Enter 0.0, 8.0; Select *Sec*

Select *Y Fixd Scale*; Enter -10.0, 70.0; Select *mv*

Select **UNITS**

Select *Hz (sec)*

**NOTE**

Prior to collecting any current data, the current meter and DSA have to be "zeroed out"; zero current reference has to be established on the DSA. Follow this interim procedure to zero reference the current meter and DSA.

- a. Remove the current probe from the circuit and close the probe. Place the probe in a magnetic benign location.
- b. Depress "Start Capture" on the DSA.
- c. With the "capture in process", adjust the "output DC level" control on the current amplifier to indicate zero current on the DSA.
- d. Position the current probe to its original location in accordance with Figure 8.

The Instrument is now ready to capture and plot 80 seconds of data.

14. Start the DSA signal capture by depressing "Start Capture."
15. Obtain a record of the Noisy Bus current waveform. On the Relay Board, turn the switch OFF. Using the Y markers, mark the maximum current amplitude as indicated in Figure 16. Plot the obtained waveform and attach a hard copy of the scan to TDS 5.
16. Examine the expanded waveform to find the peak current over the entire 80 second scan. Record the peak current on TDS 5. A representative Noisy Bus Current is shown in Figures 16 and 17.
17. Calculate the Average Noisy Bus Current as follows:

Select **VIEW INPUT**

Select *Time Record*: Note - the display shows the first 8 seconds of data and the heading changes to read "Cap Tim Rec"

Select **MATH**

Select *Next*

Select *Intgrt*: Note the display changes to present an integrated value of the current waveform.

Select **X**;

Move the X marker to the maximum right of the display. The Y value is indicative of the integrated current value over the entire 8 second period. Plot this waveform and attach a hard copy of the scan to TDS 5.

Multiply the maximum Y value by the current/ div as selected on the current amplifier, then divide by 8 seconds to acquire an average current/ second value. As an example: if the current amplifier is set up to display 200 ma/ 10 mv per division, and the maximum Y value = 32.4 mv:

$$[32.4\text{mv} \times (200\text{ma}/ 10\text{mv})]/ 8 \text{ sec} = 81\text{ma}/ \text{sec}$$

Enter this value on TDS 5

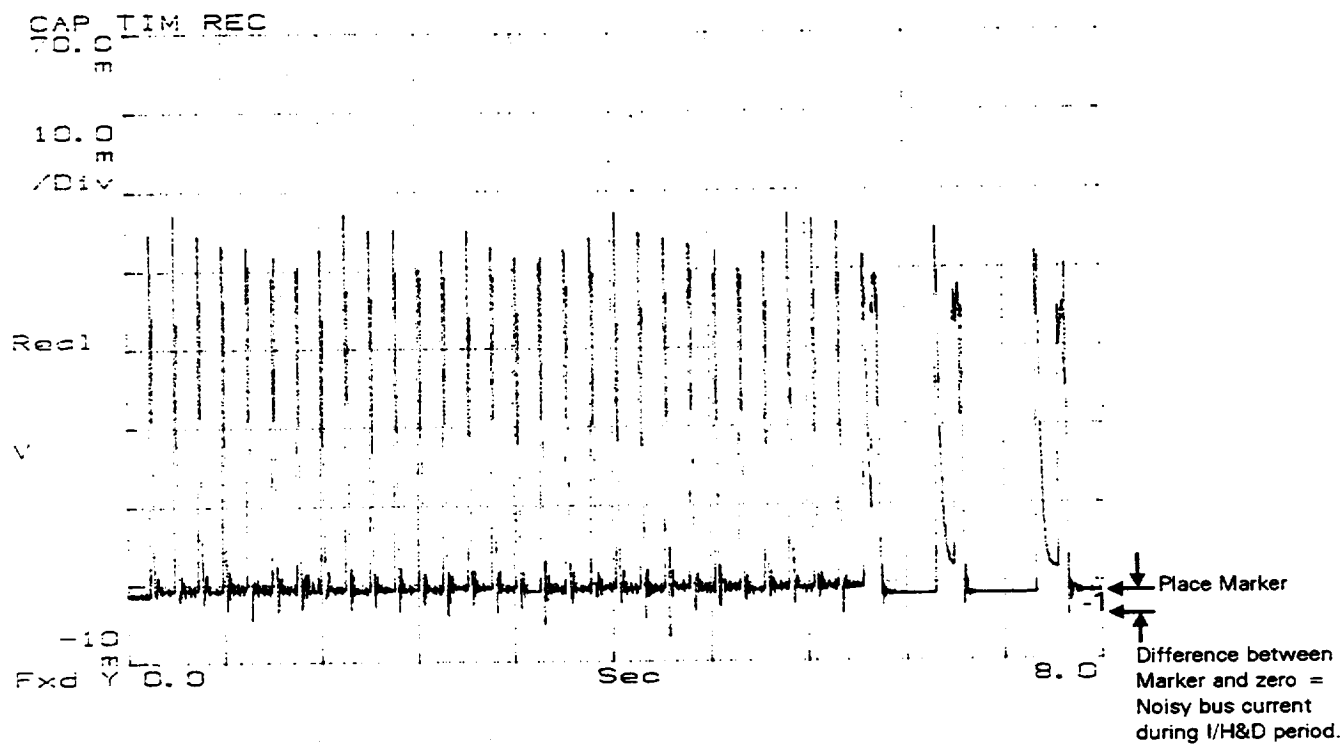


Figure 16. Typical Noisy Power Bus Current

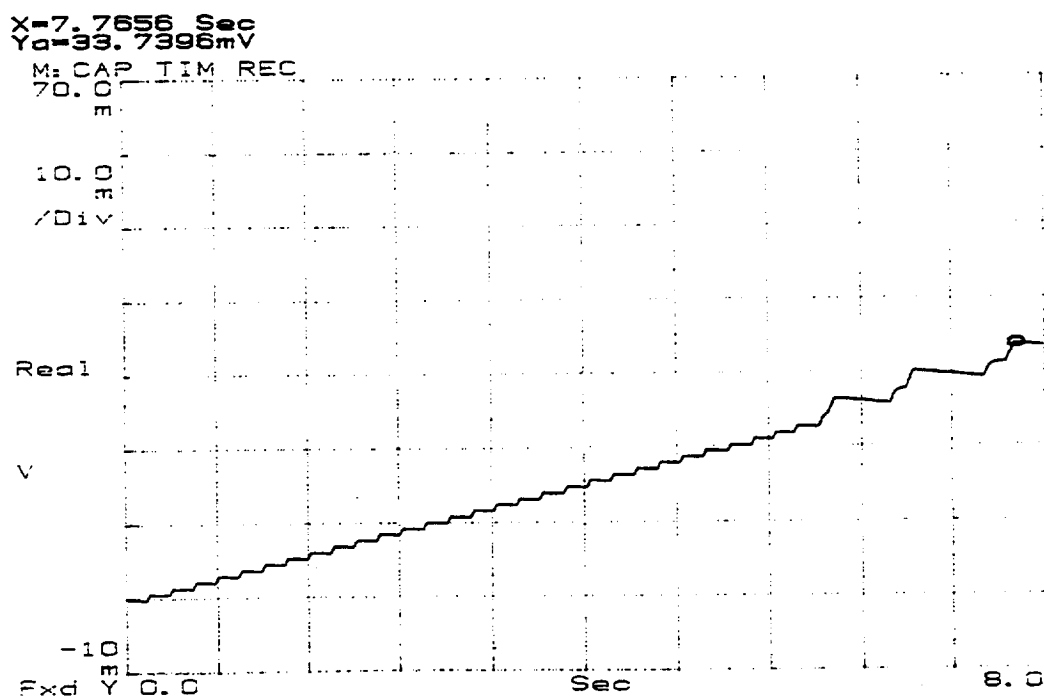


Figure 17. Typical Noisy Power Bus Integration

19 Aug 98

18. Compute the operating peak and average power in watts from the measured values in steps 16 and 17 above. Record the computed values on TDS 5. Compute Noisy Bus current during the integrate/hold, dump (I/H, D) time period (Refer to Figure 16). Record the data on TDS 5.
19. With the multimeter, adjust the external power supply PS1 to  $29 \pm 0.10$  vdc as measured between J1-5 (high) and J1-7 (low). Record this voltage on TDS 5.
20. Repeat steps 13 through 18.
21. With the multimeter, adjust the external power supply PS1 to  $31 \pm 0.10$  vdc as measured between J1-5 (high) and J1-7 (low). Record this voltage on TDS 5.
22. Repeat steps 13 through 18.

**3.3.3.2.2 Noisy power bus turn on transient test.** The Noisy Power Bus turn on transient shall be verified at +31 volts as follows:

1. The setup should be intact from paragraph 3.3.3.2.1 testing
2. Verify the external power supply (PS1) is adjusted to  $31 \pm 1$  vdc, make appropriate adjustments, and the unit is in WARM CAL position.
3. Configure the Dynamic Signal Analyzer (DSA) as follows:

Select **MEAS MODE**  
     Select *Time Capture*  
     Select *Capture Select*  
     Select *Capture Length*; Enter 80.0; Select *msec*  
 Select **FREQ**  
     Select *Freq Span*; Enter 100.0; Select *KHz*  
     Select *E SMPL Off*  
     Select *Time Length*; Enter 8.0; Select *msec*  
 Select **SELECT MEAS**  
     Select *Power Spec*  
     Select *CH1 Active*  
 Select **WINDOW**  
     Select *Hann*  
 Select **SOURCE**  
     Select *Source Off*  
 Select **AVG**  
     Select *Avg Off*  
     Select *Tim Av Off*  
 Select **RANGE**  
     Select *Chan 1 Range*; Enter 1; Select *V*  
 Select **INPUT COUPLE**  
     Select *CH1 DC*  
     Select *CH 1 Ground*  
 Select **INPUT TRIG**  
     Select *Trig Level*; Enter 100; Select *mv*  
     Select *Arm AU*  
     Select *Chan 1 Input*  
     Select *Slope +*  
 Select **TRIG DELAY**  
     Enter 0.0; Select *Sec*



Select **COORD**  
    Select *Real*  
Select **VIEW INPUT**  
    Select *Time Buff*  
Select **SCALE**  
    Select *X Fixd Scale*; Enter 0.0, 80.0; Select *msec*  
    Select *Y Fixd Scale*; Enter 0, 640.0; Select *mv*  
Select **UNITS**  
    Select *Hz (sec)*

#### NOTE

Prior to collecting any current data, the current meter and DSA have to be "zeroed out"; zero current reference has to be established on the DSA. Follow this interim procedure to zero reference the current meter and DSA.

- a. Remove the current probe from the circuit and close the probe. Place the probe in a magnetic benign location.
  - b. Depress "Start Capture" on the DSA.
  - c. With the "capture in process", adjust the "output DC level" control on the current amplifier to indicate zero current on the DSA.
  - d. Position the current probe to its original location in accordance with Figure 8.
4. Adjust PS2 for +28vdc.
  5. Start the DSA signal capture by depressing "Start Capture"; wait for the DSA message "waiting for trigger" before proceeding.
  6. On the Relay Board, turn the switch ON and obtain a record of the Noisy Bus Turn on current waveform. On the Relay Board, turn the switch OFF. Adjust the display time base and voltage sensitivity to allow for adequate current and pulse duration measurements. Plot the obtained waveform and attach a hard copy of the scan to TDS 6. A representative Noisy Bus Turn-on is shown in Figures 18 and 19.
  7. Measure the Turn On pulse width; record this value in TDS 6.
  8. Compute the peak current as follows:

Multiply the maximum Y value by the current/ div as selected on the current amplifier. As an example: if the current amplifier is set up to display 200 ma/ 10 mv per division, and the maximum Y value = 276mv:

$$276\text{mv} \times (200\text{ma}/ 10\text{mv}) = 5520\text{ma} = 5.52 \text{ amps}$$

Record this value on TDS 6.

9. The 1st derivative of the current waveform must be calculated. Compute the  $dI/dT$  as follows:

The most probable location of the greatest current demand is during the first positive transition after voltage application. If this is the case, expand that segment of the display and measure the greatest voltage transition in the smallest time transition. The change in voltage times the current/ div as selected on the current amplifier produces the change in current. Next divide this change in current by the change in time (in microseconds). This value is  $dI/dT$ . Example:

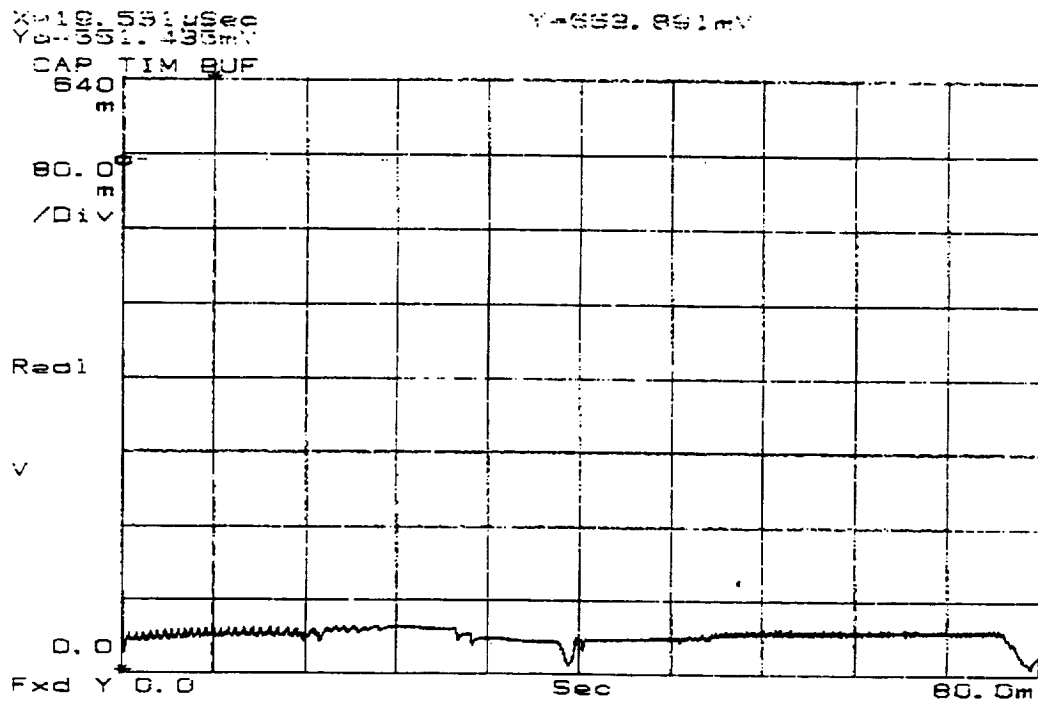


Figure 18. Typical Noisy Bus Turn On Transient

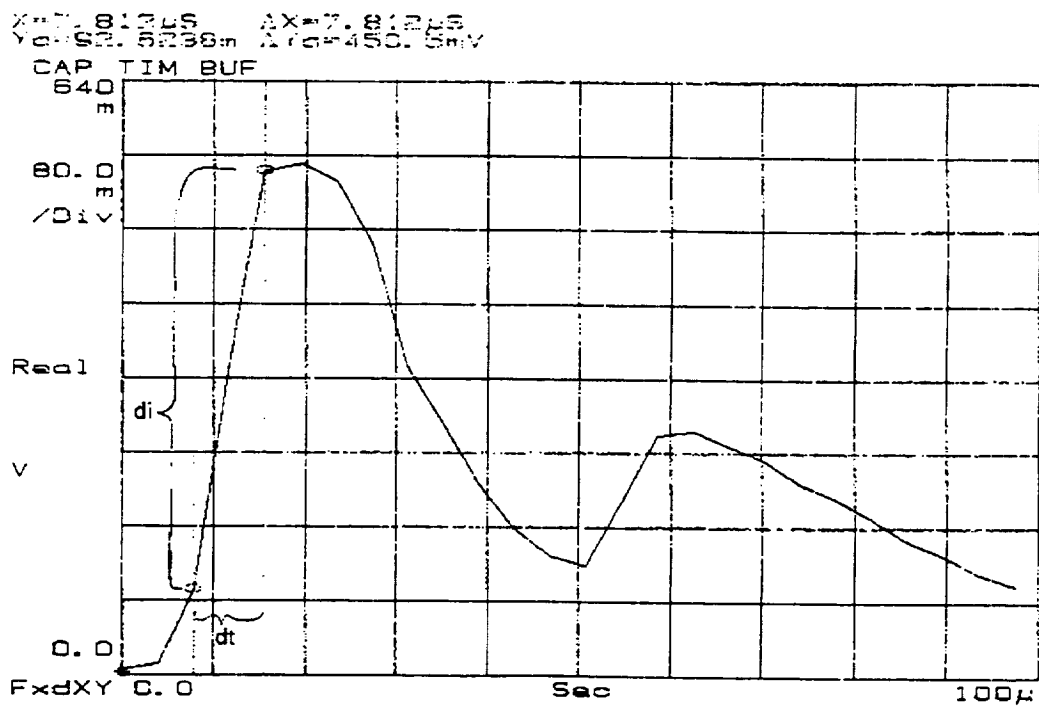


Figure 19. Typical Noisy Bus Turn On Expanded

Change in voltage .....144 mv  
Change in time (microseconds) .....19.5 us  
Current/ div on current amp .....200ma/ 10mv

$$144\text{mv} \times (200\text{ma} / 10\text{mv}) / 19.5 \text{ us} = 147.7\text{ma per us}$$

10. Record the computed value on TDS 6.
11. With the multimeter, adjust the external power supply PS1 to  $29 \pm 0.10\text{vdc}$  as measured between J1-5 (high) and J1-7 (low).
12. Repeat steps 3 through 10.
13. With the multimeter, adjust the external power supply PS1 to  $27 \pm 0.10\text{vdc}$  as measured between J1-5 (high) and J1-7 (low).
14. Repeat steps 3 through 10.
15. Turn the STE power supply panel Q/ pulse switch OFF (refer to Figure 3).
16. Turn the STE power supply panel main power switch OFF (refer to Figure 3).

**3.3.3.3 Survival heater power bus interface tests.** The operational characteristics of the redundant survival buses A and B shall be verified during ambient thermal cycle testing using test procedure AE-26151/9. For final CPT attach data sheet from Survival Heater Test to this data package.

**3.3.4 Passive analog interface test.** This test provides the verification of the passive analog telemetry requirements found in the following documents:

UIID	None
GIRD	Sections 4.5.2, 4.5.3, and 6.3
POS	Section 4.6.3.6 (8)
ICD	Sections 4.5 and 6.3

Passive analog telemetry signals are output from the unit through the spacecraft interface connector J2. To verify these signals, perform the following procedures:

1. The unit should be configured as shown in Figure 12 if performing an LPT or Figure 15 if performing a CPT. Turn the STE main power switch on (computer should be on, STE power panel should be off). From the A1 directory and at the "\$" prompt, enter the command to the STE "RUN E1". The EOS/AMSU-A1 software program should be running as evidenced by the STE screen shown in Figure 9.
2. Enter the STE command "[ 2 ] MONITOR ONLY". The screen should now be as shown in Figure 10.
3. Enter the STE command "[ 12 ] UNPOWERED THERMISTORS". The screen should now be as shown in Figure 20.
4. The thermistor data should update every 8 seconds. Enter STE command "[ 2 ]" to print the screen. Enter the data on TDS 7 and attach the printout to TDS 7.

### 3.3.5 Command and data handling bus interface test

19 Aug 98

EOS A1 - XX OB.A1] E1.		29-SEP-97 14:44:25	SCAN NUMBER
[ 5 ]	SCIENCE DATA	ELEMENT	0000
[ 6 ]	CONTROL/STATUS	ELEMENT	00
[ 7 ]	ENGINEERING	ELEMENT	00
UNPOWERED THERMISTORS			
NO	DATA	TEMP C	
1	A1-1 SCAN MOTOR TEMPERATURE	23.50	
2	A1-2 SCAN MOTOR TEMPERATURE	23.40	
3	A1-1 RF SHELF TEMPERATURE #1	20.00	
4	A1-2 RF SHELF TEMPERATURE #1	19.90	
5	A1-1 WARM LOAD TEMPERATURE	20.30	
6	A1-2 WARM LOAD TEMPERATURE	20.50	
7	A1-1 RF SHELF TEMPERATURE #2	20.05	
8	A1-2 RF SHELF TEMPERATURE #2	19.95	
POWER ON		CHECKSUM IN	CALC
SCREEN ONLY [ 2 ]		PRINT [ 3 ]	FULL
SELECT BUTTON		SA28	SA29
		[ 1 ]	RETURN

Figure 20. EOS/AMSU-A1 STE Unpowered Thermistors Screen

**3.3.5.1 Formal qualification test of the EOS/AMSU-A1 firmware (protoflight model 1<sup>st</sup> CPT only.** On 3/21/97, an initial Formal Qualification Test (FQT) of the EOS AMSU-A firmware was conducted using Test Procedure AE-26600 (CDRL 415). The results of that test were documented in Report 10974 (CDRL 217). As stated in that report, a final FQT would be performed as a part of the initial instrument CPT for the EOS protoflight models A1 and A2 to validate the firmware requirements (Report 10458, CDRL 306-2b) which could not be validated during the initial FQT. The purpose of this test is to perform that validation by repeating Test Procedure AE-26600 and conducting additional system level testing with the unit connected to the Special Test Equipment (STE). At the conclusion of paragraph 3.3.5 testing, the firmware will be validated. Perform Test Procedure AE-26600 with the following clarifications:

1. Paragraph 4.1, Load bonded Software - the last half of the paragraph beginning with "The tape labeled N7 ..." to the end of the paragraph should be ignored because the unit configuration uses flight CCAs.
2. Paragraph 4.2, Configure the test environment - replace this paragraph with the instructions provided in paragraph 3.3.5.2 steps 1 through 9 of this procedure.
3. Paragraph 4.4.4, C through L. These are replaced by section 3.3.5.3 of this procedure.

**3.3.5.2 Instrument commanding test.** This test provides the verification of the instrument commanding capability. Each of the commands shown in Table III with the exception of [ 21 ] GSE Modes will be sent to the unit and verified that it was received and carried out by the unit. GSE Modes will be verified during test point interface testing (paragraph 3.3.6). Perform the following procedures.

1. Configure the unit as shown in Figure 12. If the unit is already configured, skip to step 7.

Table III. EOS/AMSU-A1 Instrument Commands

STE Command Screen Number	STE Command	Instrument Status
[ 9 ]	Scanner A1-1 Power	ON / OFF
[ 10 ]	Scanner A1-2 Power	ON / OFF
[ 11 ]	Antenna Full Scan Mode	YES / NO
[ 12 ]	Antenna Warm Cal Mode	YES / NO
[ 13 ]	Antenna Cold Cal Mode	YES / NO
[ 14 ]	Antenna Nadir Mode	YES / NO
[ 15 ]	PLO Power	PLO #1 / PLO #2
[ 16 ]	Cold Cal Position 1	YES / NO
[ 17 ]	Cold Cal Position 2	YES / NO
[ 18 ]	Cold Cal Position 3	YES / NO
[ 19 ]	Cold Cal Position 4	YES / NO
[ 20 ]	Reset C&DH Processor	Resets 1553 firmware
[ 21 ]	GSE Modes	YES / NO

2. Connect a 25 pin breakout box to J1 of the instrument. Connect a 37 pin breakout box to J4 of the instrument.
3. Connect the STE to the instrument using the following STE interface cables:
  - a. STE interface cable J1 (1356648-1)
  - b. STE interface cable J2 (1356648-2)
  - c. STE interface cable J3 (1356648-3)
4. Connect STE interface cable J1 from EOS J1 found on the STE power panel shown in Figure 4 to the remaining end of the 25 pin breakout box connected to J1 on the unit.
5. Connect STE interface cable J2 from EOS J2 found on the STE test panel shown in Figure 5 to J2 on the unit.
6. Connect STE interface cable J3 from EOS A&B J1 found on the STE interface panel shown in Figure 6 to J3 on the unit.
7. Turn the STE MAIN POWER switch on (refer to Figures 2 and 3 (computer should be on, STE power panel should be off)). From the A1 directory and at the "\$" prompt, enter the command to the STE "RUN E1". The EOS/AMSU-A1 software program should be running as evidenced by the STE screen shown in Figure 9.
8. Turn the STE power supply panel Q/MAIN switch on (refer to Figure 3). With a multimeter, adjust the Quiet Bus voltage at the breakout box to  $29 \pm 0.10$  volts (between J1-1 and J1-3).

9. Turn the STE power supply panel N/PULSE switch on (refer to Figure 3). With a multimeter, adjust the Noisy Bus voltage at the breakout box to  $29 \pm 0.10$  volts (between J1-5 and J1-7).
10. Go to the Commands screen on the STE. From the Main screen shown in Figure 9, enter the STE command "[ 2 ] MONITOR ONLY". The screen should now be as shown in Figure 10. Enter the STE command "[ 14 ] COMMANDS". The screen should now be as shown in Figure 11.
11. The instrument commands shown in Table III are now ready to be tested.
12. Enter the STE command "[ 11 ] ANTENNA FULL SCAN MODE". Look at the commands screen to see that the command was received by the instrument (the state of that command should go from NO to YES). Record the status on TDS 8.
13. Enter the STE command "[ 9 ] SCANNER A1-1 POWER". Look at the commands screen to see that the command was received by the instrument (the state of that command should go from NO (OFF) to YES (ON)). The A1-1 scan motor should now be scanning. Record the status on TDS 8.
14. Enter the STE command "[ 9 ] SCANNER A1-1 POWER". Look at the commands screen to see that the command was received by the instrument (the state of that command should go from YES (ON) to NO (OFF)). The A1-1 scan motor should stop scanning. Record the status on TDS 8.
15. Enter the STE command "[ 10 ] SCANNER A1-2 POWER". Look at the commands screen to see that the command was received by the instrument (the state of that command should go from NO (OFF) to YES (ON)). The A1-2 scan motor should now be scanning. Record the status on TDS 8.
16. Enter the STE command "[ 10 ] SCANNER A1-2 POWER". Look at the commands screen to see that the command was received by the instrument (the state of that command should go from YES (ON) to NO (OFF)). The A1-2 scan motor should stop scanning. Record the status on TDS 8.
17. Enter the STE command "[ 9 ] SCANNER A1-1 POWER". Wait for at least 18 seconds and then enter the STE command "[ 10 ] SCANNER A1-2 POWER". Look at the commands screen to see that the commands were received by the instrument (the state of those commands should go from NO (OFF) to YES (ON)). Both A1-1 and A1-2 scan motors should now be scanning. Record the status on TDS 8.
18. Enter the STE command "[ 12 ] ANTENNA WARM CAL MODE". Look at the commands screen to see that the command was received by the instrument (the state of that command should go from NO to YES and the state of ANTENNA IN FULL SCAN MODE should go from YES to NO). Both A1-1 and A1-2 scan motors should have moved to the warm calibration position. Record the status on TDS 8.
19. Enter the STE command "[ 14 ] ANTENNA NADIR MODE". Look at the commands screen to see that the command was received by the instrument (the state of that command should go from NO to YES and the state of ANTENNA WARM CAL MODE should go from YES to NO). Both A1-1 and A1-2 scan motors should have moved to the nadir position. Record the status on TDS 8.
20. Enter the STE command "[ 13 ] ANTENNA COLD CAL MODE". Look at the commands screen to see that the command was received by the instrument (the state of that command should go from NO to YES and the state of ANTENNA NADIR MODE should go from YES to NO). Both A1-1 and A1-2 scan motors should have moved to the cold calibration 1 position (LSB=0, MSB=0). Record the status on TDS 8.
21. Enter the STE command "[ 19 ] COLD CAL POSITION 4". Look at the commands screen to see that the command was received by the instrument (the state of that command should go from NO to YES. Also, the state of ANTENNA COLD CAL MODE should stay YES). Both A1-1 and A1-2 scan motors should have moved slightly to the cold calibration 4 position. Record the status on TDS 8.

22. Enter the STE command “[ 18 ] COLD CAL POSITION 3”. Look at the commands screen to see that the command was received by the instrument (the state of that command should go from NO to YES. Also, the state of ANTENNA COLD CAL MODE should stay YES). Both A1-1 and A1-2 scan motors should have moved slightly to the cold calibration 3 position. Record the status on TDS 8.
23. Enter the STE command “[ 17 ] COLD CAL POSITION 2”. Look at the commands screen to see that the command was received by the instrument (the state of that command should go from NO to YES. Also, the state of ANTENNA COLD CAL MODE should stay YES). Both A1-1 and A1-2 scan motors should have moved slightly to the cold calibration 2 position. Record the status on TDS 8.
24. Enter the STE command “[ 16 ] COLD CAL POSITION 1”. Look at the commands screen to see that the command was received by the instrument (the state of that command should go from NO to YES. Also, the state of ANTENNA COLD CAL MODE should stay YES). Both A1-1 and A1-2 scan motors should have moved slightly to the cold calibration 1 position. Record the status on TDS 8.
25. Enter the STE command “[ 15 ] PLO POWER”. Look at the commands screen to see that the command was received by the instrument (the state of that command should go from PLO #1 to PLO #2 or vice versa depending on its starting state. Record the status on TDS 8. Leave this step with PLO #1 active (if PLO #2 is active enter STE command “[ 15 ] PLO POWER” to make PLO #1 active).
26. Enter the STE command “[ 20 ] RESET C&DH PROCESSOR”. Look at the bottom of the commands screen to see that SA28 resets and starts counting from 1. Record the status on TDS 8.
27. Leave the unit powered and the setup intact for paragraph 3.3.5.2 testing.

**3.3.5.3 Science and engineering data verification.** The engineering data in the engineering packet is also found embedded in the science data packet. The STE does a comparison between the data in the engineering packet and the same data located in the science data packet. If there is total agreement between the two data sets then a message “ENGR OK” appears at the bottom of the STE screen. Because of the fact that the two packets agree with respect to engineering data, this test validates both science and engineering data by verifying the data in the science data packet for each of the following instrument modes. Look at ENGINEERING DATA, also UNPOWERED THERMISTORS prior to starting these modes.

1. Full Scan Mode (3.3.5.3.1)
2. Warm Cal Mode (3.3.5.3.1)
3. Cold Cal Mode (3.3.5.3.3)
4. Nadir Mode (3.3.5.3.4)

**3.3.5.3.1 Full scan mode.** The full scan mode science and engineering data is verified as follows:

1. From the STE command screen shown in Figure 11, enter the STE command “[ 11 ] ANTENNA FULL SCAN MODE”. Look at the commands screen to see that the command was received by the instrument (the state of that command should go from NO to YES). Record the status on TDS 9.
2. Look to see that “ENGR OK” message is displayed in bottom left corner of screen. Record the status on TDS 9.
3. Look to see that the unit is operating in full scan mode. Enter the observed result on TDS 9.
4. Enter the STE command “[ 3 ]” to obtain a full printout. Review the following data and record the results on TDS 9.
  - a. Packet ID (elements 1 and 2, page 1 of printout)

- b. Packet length (elements 3 and 4, page 1 of printout)
  - c. Unit serial number (elements 5 and 6, page 1 of printout)
  - d. Instrument mode/.status (elements 7 and 8, page 1 of printout)
  - e. Reflector positions (use data from procedure AE-26002/1 TDS 5 and 6 for required position data) (pages 1 - 6 of printout)
  - f. Radiometer scene data ( pages 1 - 6 of printout)
  - g. PRT temperature data (elements 1090 - 1180, page 7 of printout) Refer to Table IV for PRT data description.
  - h. Status (page 8 of printout)
  - i. Engineering data (page 8 of printout)
5. Attach the printout to TDS 9.

**3.3.5.3.2 Warm cal mode.** The warm cal mode science and engineering data is verified as follows:

1. From the STE command screen shown in Figure 11, enter the STE command “[ 12 ] WARM CAL MODE”. Look at the commands screen to see that the command was received by the instrument (the state of that command should go from NO to YES). Record the status on TDS 10.
2. Look to see that “ENGR OK” message is displayed in bottom left corner of screen. Record the status on TDS 10.
3. Look to see that the unit reflectors have moved to warm cal position. Enter the observed result on TDS 10.
4. Enter the STE command “[ 3 ]” to obtain a full printout. Review the following data and record the results on TDS 10.
  - a. Packet ID (elements 1 and 2, page 1 of printout)
  - b. Packet length (elements 3 and 4, page 1 of printout)
  - c. Unit serial number (elements 5 and 6, page 1 of printout)
  - d. Instrument mode/.status (elements 7 and 8, page 1 of printout)
  - e. Reflector positions (use data from procedure AE-26002/1 TDS 5 and 6 for required position data for warm cal position) (pages 1 - 6 of printout)
  - f. Radiometer scene data (pages 1 - 6 of printout)
  - g. PRT temperature data (elements 1090 - 1180, page 7 of printout)
  - h. Status (page 8 of printout)
  - i. Engineering data (page 8 of printout)
5. Attach the printout to TDS 10.



Table IV PRT Data Description

PRT Number	Description
1	Scan Motor A1-1 Temperature
2	Scan Motor A1-2 Temperature
3	Feedhorn A1-1 Temperature
4	Feedhorn A1-2 Temperature
5	RF Mux - A1-1 Temperature
6	RF Mux - A1-2 Temperature
7	Local Oscillator - Channel 3 Temperature
8	Local Oscillator - Channel 4 Temperature
9	Local Oscillator - Channel 5 Temperature
10	Local Oscillator - Channel 6 Temperature
11	Local Oscillator - Channel 7 Temperature
12	Local Oscillator - Channel 8 Temperature
13	Local Oscillator - Channel 15 Temperature
14	Phase Locked Oscillator No. 2 Temperature
15	Phase Locked Oscillator No. 1 Temperature
16	S.P. (1553 Interface) Temperature
17	Mixer/IF Amplifier - Channel 3 Temperature
18	Mixer/IF Amplifier - Channel 4 Temperature
19	Mixer/IF Amplifier - Channel 5 Temperature
20	Mixer/IF Amplifier - Channel 6 Temperature
21	Mixer/IF Amplifier - Channel 7 Temperature
22	Mixer/IF Amplifier - Channel 8 Temperature
23	Mixer/IF Amplifier - Channel 9/14 Temp
24	Mixer/IF Amplifier - Channel 15 Temperature
25	IF Amp - Channel 11/14 Temperature
26	IF Amp - Channel 9 Temperature
27	IF Amp - Channel 10 Temperature
28	IF Amp - Channel 11 Temperature
29	DC/DC Converter Temperature
30	IF Amp - Channel 13 Temperature
31	IF Amp - Channel 14 Temperature
32	IF Amp - Channel 12 Temperature
33	RF Shelf - A1-1 Temperature
34	RF Shelf - A1-2 Temperature
35	Detector/Preamplifier Temperature
36	A1-1 Warm Load 1 Temperature
37	A1-1 Warm Load 2 Temperature
38	A1-1 Warm Load 3 Temperature
39	A1-1 Warm Load 4 Temperature
40	A1-1 Warm Load Center Temperature
41	A1-2 Warm Load 1 Temperature
42	A1-2 Warm Load 2 Temperature
43	A1-2 Warm Load 3 Temperature
44	A1-2 Warm Load 4 Temperature
45	A1-2 Warm Load Center Temperature

**3.3.5.3.3 Cold cal mode.** The cold cal mode science and engineering data is verified as follows:

1. From the STE command screen shown in Figure 11, enter the STE command "[ 13 ] COLD CAL MODE". Look at the commands screen to see that the command was received by the instrument (the state of that command should go from NO to YES). Record the status on TDS 11.
2. Look to see that "ENGR OK" message is displayed in bottom left corner of screen. Record the status on TDS 11.
3. Look to see that the unit reflectors have moved to cold cal position 1. Enter the observed result on TDS 11. Enter the STE command [ 3 ] to obtain a full printout. Use this data in step 6.
4. From the STE command screen shown in Figure 11, enter the STE command "(10) ANTENNA FULL SCAN MODE". Look at the command screen to see that the command was received by the instrument (the state of the command should go from NO to YES).
5. From the STE command screen shown in Figure 11, enter the STE command " [ 12 ] ANTENNA COLD CAL MODE". Look at the command screen to see that the command was received by the instrument (the state of the command should go from NO to YES).
6. Enter the STE command [ 3 ] to obtain a full printout. Review the following data and record the results on TDS 11.
  - a. packet ID (elements 1 and 2, page I of printout) (from step 3 full printout)
  - b. packet length (elements 3 and 4, page I of printout) (from step 3 full printout)
  - c. unit serial number (element 5 and 6, page I of printout) (from step 3 full printout)
  - d. Instrument/ mode status (element 7 and 8, page 1 of printout) (from step 3 full printout)
  - e. reflector positions (use data from procedure AE-26002/2 TDS 2 for required position data for cold cal position 1) (page 1 and 2 of printout) (from step 3 full printout used for TDS 11 sheet 3, step 6 full print used for TDS 11 sheet 4)
  - f. radiometric scene data (pages I and 2 of printout) (from step 3 full printout)
  - g. PRT temperature data (elements 262 - 300, page 2 of printout) (from step 3 full printout)
  - h. status (page 3 of printout) (from step 3 full printout)
  - i. engineering data (page 3 of the printout) (from step 3 full printout)
7. Attach the printout to TDS 11.
8. From the STE command screen shown in Figure 11, enter the STE command "[ 15 ] COLD CAL POSITION 2". Look at the command screen to see that the command was received by the instrument (the state of the command should go from NO to YES). Record status on TDS 11
9. Look to see that "ENGR OK" message is displayed in the bottom left corner of screen. Record status on TDS 11
10. Look to see that the unit reflector has moved to cold cal position 2. Enter the results on TDS 11. Enter the STE command [ 3 ] to obtain a full printout, use this data in step 14.

11. From the STE command screen shown in Figure 11, enter the STE command"[ 10 ] ANTENNA FULL SCAN MODE". Look at the command screen to see that the command was received by the instrument (the state of the command should go from NO to YES).
12. From the STE command screen shown in Figure 11, enter the STE command"[ 12 ] ANTENNA COLD CAL MODE". Look at the command screen to see that the command was received by the instrument (the state of the command should go from NO to YES).
13. Look to see that the unit reflector has moved to cold cal position 2
14. Enter the STE command [ 3 ] to obtain a full printout. Review the following data and record the results on TDS 11
  - a. Instrument/ mode status (element 7 and 8, page 1 of printout) (from step 10 full printout)
  - b. status (page 3 of printout) (from step 10 full printout)
  - c. reflector positions (use data from procedure AE-26002/2 TDS 2 for required position data for cold cal position 1) (page 1 and 2 of printout) (from step 10 full printout for TDS 11 sheet 3, from step 14 full printout for TDS 11 sheet 4)
15. Attach the printout to TDS 11
16. From the STE command screen shown in Figure 11, enter the STE command"[ 16 ] COLD CAL POSITION 3". Look at the command screen to see that the command was received by the instrument (the state of the command should go from NO to YES). Record status on TDS 11.
17. Look to see that "ENGR OK" message is displayed in the bottom left corner of screen. Record status on TDS 11.
18. Look to see that the unit reflector has moved to cold cal position 3. Enter the results on TDS 11. Enter the STE command [ 3 ] to obtain a full printout, use this data in step 22.
19. From the STE command screen shown in Figure 11, enter the STE command"[ 10 ] ANTENNA FULL SCAN MODE". Look at the command screen to see that the command was received by the instrument (the state of the command should go from NO to YES).
20. From the STE command screen shown in Figure 11, enter the STE command"[ 12 ] ANTENNA COLD CAL MODE". Look at the command screen to see that the command was received by the instrument (the state of the command should go from NO to YES).
21. Look to see that the unit reflector has moved to cold cal position 3.
22. Enter the STE command [ 3 ] to obtain a full printout. Review the following data and record the results on TDS 11.
  - a. Instrument/ mode status (element 7 and 8, page 1 of printout) (from step 18 full printout)
  - b. status (page 3 of printout) (from step 18 full printout)
  - c. reflector positions (use data from procedure AE-26002/2 TDS 2 for required position data for cold cal position 1) (page 1 and 2 of printout) (step 18 full printout for TDS 11 sheet 3, step 22 full printout for TDS 11 sheet 4)
23. Attach the printout to TDS 11

24. From the STE command screen shown in Figure 11, enter the STE command "[ 17 ] COLD CAL POSITION 4". Look at the command screen to see that the command was received by the instrument (the state of the command should go from NO to YES). Record status on TDS 11.
25. Look to see that "ENGR OK" message is displayed in the bottom left corner of screen. Record status, on TDS 11.
26. Look to see that the unit reflector has moved to cold cal position 4. Enter the results on TDS 11. Enter the STE command [ 3 ] to obtain a full printout, use this data in step 30.
27. From the STE command screen shown in Figure 11, enter the STE command "[ 10 ] ANTENNA FULL SCAN MODE". Look at the command screen to see that the command was received by the instrument (the state of the command should go from NO to YES).
28. From the STE command screen shown in Figure 11, enter the STE command "[ 12 ] ANTENNA COLD CAL MODE". Look at the command screen to see that the command was received by the instrument (the state of the command should go from NO to YES).
29. Look to see that the unit reflector has moved to cold cal position 4.
30. Enter the STE command [ 3 ] to obtain a full printout. Review the following data and record the results on TDS 11
  - a. Instrument/ mode status (element 7 and 8, page 1 of printout) (from step 26 full printout)
  - b. Status (page 3 of printout) (from step 26 full printout)
  - c. Reflector positions (use data from procedure AE-26002/2 TDS 2 for required position data for cold cal position 1) (page 1 and 2 of printout) (step 26 full printout used for TDS 11 sheet 3, step 30 full printout used for TDS 11 sheet 4)
31. Attach the printout to TDS 11.

**3.3.5.3.4 Nadir mode.** The nadir mode science and engineering data is verified as follows:

1. From the STE command screen shown in Figure 11, enter the STE command "[ 14 ] NADIR MODE". Look at the commands screen to see that the command was received by the instrument (the state of that command should go from NO to YES). Record the status on TDS 12.
2. Look to see that "ENGR OK" message is displayed in bottom left corner of screen. Record the status on TDS 12.
3. Look to see that the unit reflectors have moved to nadir position. Enter the observed result on TDS 12.
4. Enter the STE command "[ 3 ]" to obtain a full printout. Review the following data and record the results on TDS 12.
  - a. Packet ID (elements 1 and 2, page 1 of printout)
  - b. Packet length (elements 3 and 4, page 1 of printout)
  - c. Unit serial number (elements 5 and 6, page 1 of printout)
  - d. Instrument mode/.status (elements 7 and 8, page 1 of printout)

- e. Reflector positions (use data from procedure AE-26002/1 TDS 5 and 6 for nadir position data) (pages 1 - 6 of printout) .
  - f. Radiometer scene data (pages 1 - 6 of printout)
  - g. PRT temperature data (elements 1090 - 1180, page 7 of printout)
  - h. Status (page 8 of printout)
  - i. Engineering data (page 8 of printout).
5. Attach the printout to TDS 12.

**3.3.5.3.5 Noisy Bus current measurement during warm cal, cold cal and nadir mode.**

1. Place instrument in warm cal by repeating paragraph 3.3.5.3.2(1).
2. Record Noisy Bus current from STE noisy bus power supply display on TDS 13.
3. Command A1-1 scanner to "off" and record current.
4. Command A1-1 scanner to "on" and A1-2 scanner to "off" and record current.
5. Command A1-1 and A1-2 scanner to "on."
6. Place instrument in cold cal by repeating paragraph 3.3.5.3.3 (1). Repeat step number 2.
7. Place instrument in Nadir by repeating paragraph 3.3.5.3.4 (1). Repeat step number 2.

**3.3.5.4 1553 Bus interface test.**

The 1553 Bus interface shall be verified by observing its operation during full scan operation. The interface test shall be accomplished by the following steps:

1. Configure the unit as shown in Figure 21.
2. Insure all switches are closed on the 9-pin breakout box.
3. Connect oscilloscope to J3-1 (Hi) and J3-2 (lo) to measure 1553 Interface A data. A representative waveform is shown in Figure 22. Set the vertical to 5 volts; horizontal to 5 us, DC coupling: Trig-GH1. Print hard copy and attach to TDS 14.
4. Using the Vertical and Horizontal bars, measure the amplitude and rise time of the instrument response. Record these on TDS 14.
5. Repeat steps 3 and 4 for Interface B. Attach and record data on TDS 14. Connect to J3-4 (Hi) and J3-5 (Lo). Note: Figure 23 shows a typical rise-time measurement.

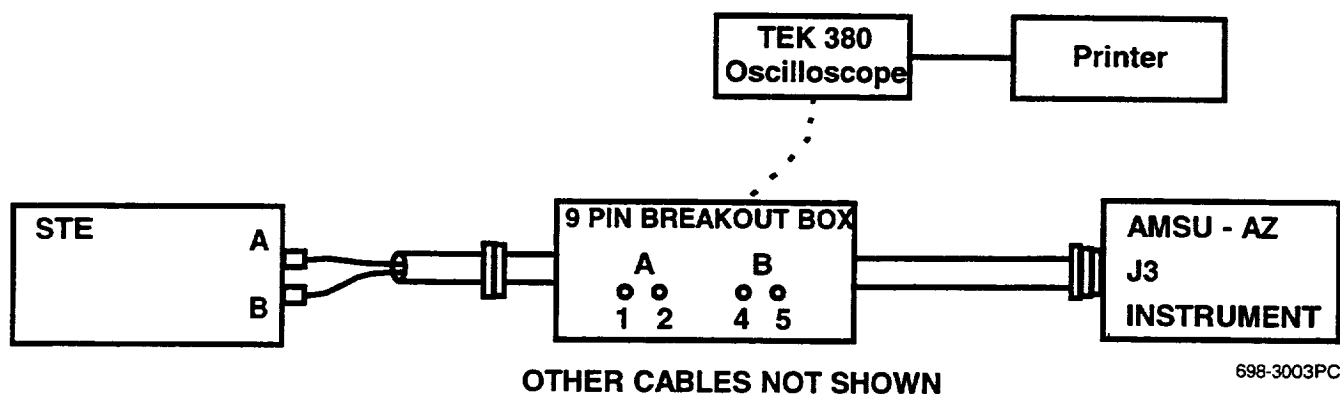


Figure 21. Configuration for 1553 Interface Set-Up

3.3.6 **Test point interface test.** The purpose of this test is twofold:

1. Verify the following test point signals:
  - a. Intentionally left blank
  - b. 8 second sync pulse test point (3.3.6.2)
  - c. Integrate/hold and dump test points (3.3.6.3)
  - d. Channel 3 through 15 analog output test points (3.3.6.4)
  - e. PLO #1 and PLO #2 lock test points (3.3.6.5).
2. Verify the following GSE mode operations:
  - a. GSE-1 mode (3.3.6.6)
  - b. GSE-2 mode (3.3.6.7)
  - c. GSE-3 mode (3.3.6.8)
  - d. GSE-4 mode (3.3.6.9)
  - e. GSE-5 mode (3.3.6.10)
  - f. GSE-7 mode (3.3.6.11).

The test point interface connector (J4) is not used during spacecraft configuration and is covered with a cover plate when the unit is operating in the flight configuration. The above test points and GSE modes are used only by Aerojet during test and evaluation of instrument performance and do not meet any system level requirements.

3.3.6.1 **Intentionally left blank.** Perform the following procedures.

3.3.6.2 **8 second sync pulse test point verification.** Perform the following procedures.

1. Connect channel 1 of the oscilloscope to pins J4-2 (High) and J4-21 (Low).
2. Plot the oscilloscope display and record the information indicated on TDS 15. Attach the plot to TDS 15.

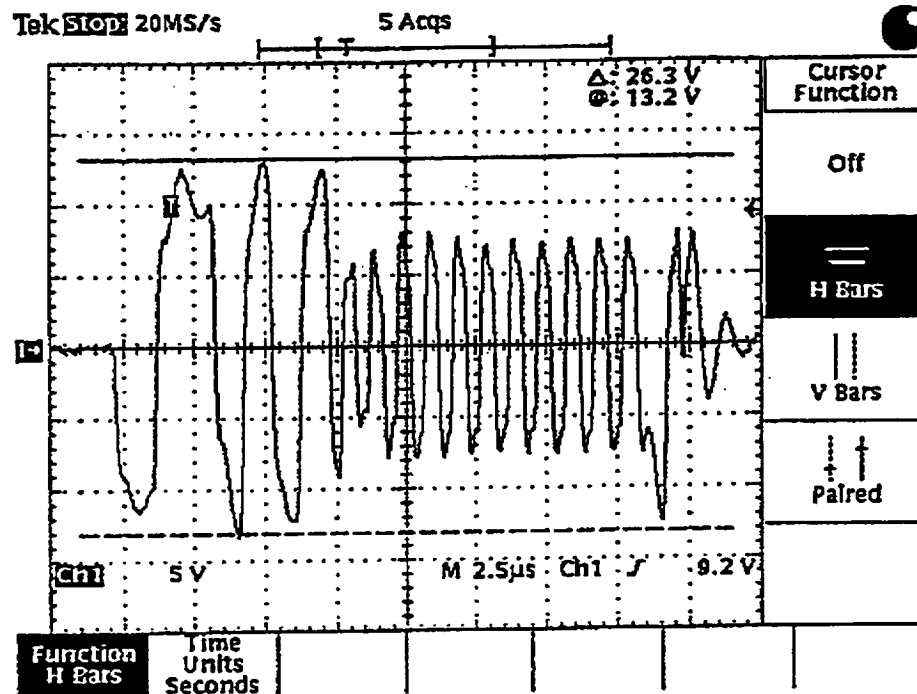


Figure 22. Typical 1553 Bus Wave Form (Instrument Response)

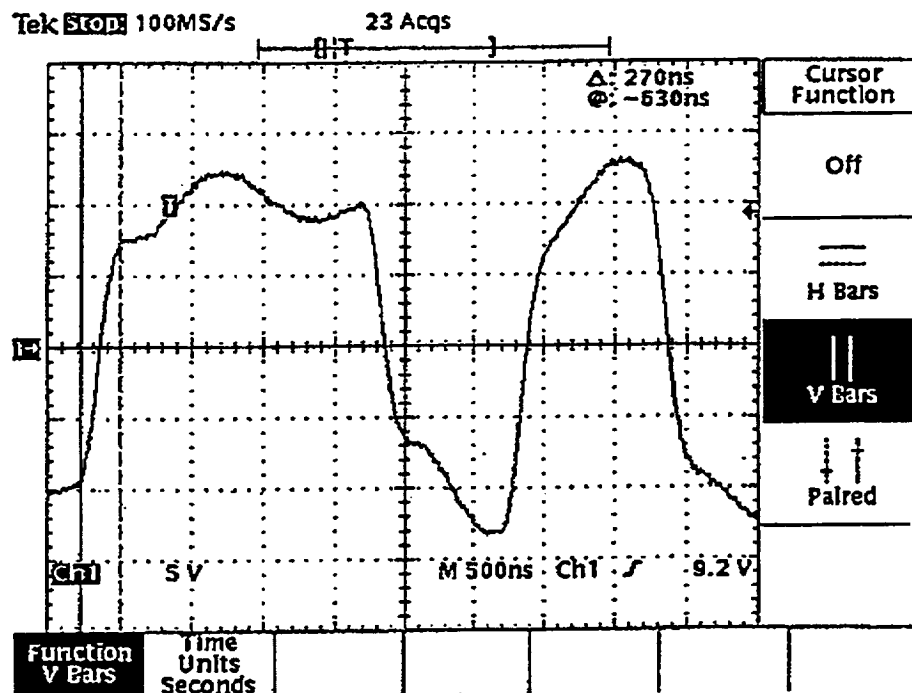


Figure 23. Typical Rise-Time Measurement

**3.3.6.3 Integrate/hold and dump test point verification.** Perform the following procedures.

1. Connect channel 1 of the oscilloscope to pins J4-6 (High) and J4-5 (Low).
2. Connect channel 2 of the oscilloscope to pins J4-24 (High) and J4-5 (Low).
3. Set the scope to trigger internally on channel 1. Optimize time and amplitude for best resolution. The desired display should look similar to the top two traces shown in Figure 24.
4. Plot the oscilloscope display and record the information indicated on TDS 16. Attach the plot to TDS 16.

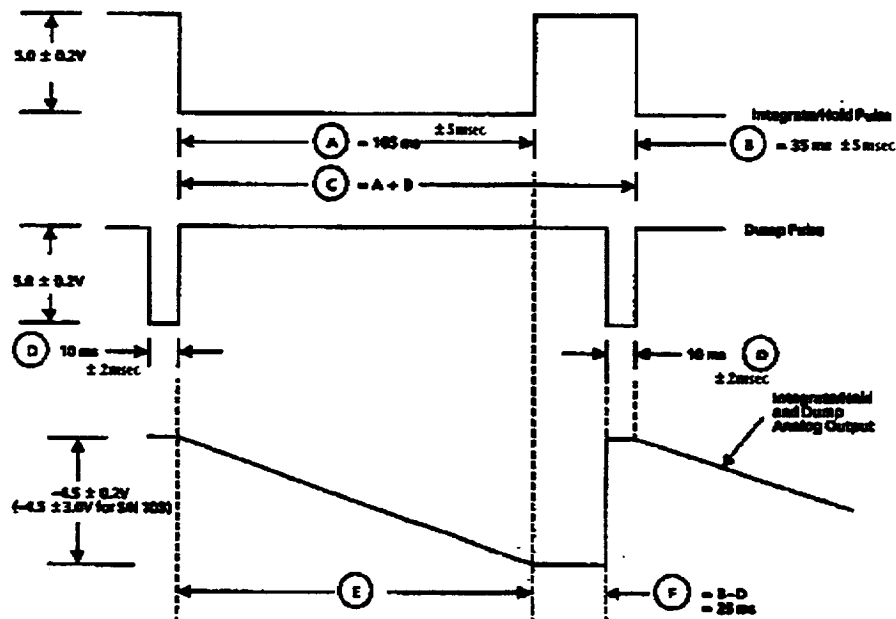


Figure 24. Integrate/Hold, Dump, and Analog Out Test Point Signals

**3.3.6.4 Radiometer channel analog output test point verification.** Perform the following procedures.

1. Connect channel 1 of the oscilloscope to pins J4-8 (High) and J4-26 (Low). Optimize time and amplitude for best resolution. The desired display should look similar to the bottom trace shown in Figure 24.
2. Plot the oscilloscope display and record the information indicated on TDS 17. Label the plot Channel 3 and attach the plot to TDS 17.
3. Connect channel 1 of the oscilloscope to pins J4-9 (High) and J4-26 (Low). Optimize time and amplitude for best resolution. The desired display should look similar to the bottom trace shown in Figure 24.
4. Plot the oscilloscope display and record the information indicated on TDS 17. Label the plot Channel 4 and attach the plot to TDS 17.
5. Connect channel 1 of the oscilloscope to pins J4-10 (High) and J4-26 (Low). Optimize time and amplitude for best resolution. The desired display should look similar to the bottom trace shown in Figure 24.
6. Plot the oscilloscope display and record the information indicated on TDS 17. Label the plot Channel 5 and attach the plot to TDS 17.



7. Connect channel 1 of the oscilloscope to pins J4-11 (High) and J4-26 (Low). Optimize time and amplitude for best resolution. The desired display should look similar to the bottom trace shown in Figure 24.
8. Plot the oscilloscope display and record the information indicated on TDS 17. Label the plot Channel 6 and attach the plot to TDS 17.
9. Connect channel 1 of the oscilloscope to pins J4-12 (High) and J4-26 (Low). Optimize time and amplitude for best resolution. The desired display should look similar to the bottom trace shown in Figure 24.
10. Plot the oscilloscope display and record the information indicated on TDS 17. Label the plot Channel 7 and attach the plot to TDS 17.
11. Connect channel 1 of the oscilloscope to pins J4-13 (High) and J4-26 (Low). Optimize time and amplitude for best resolution. The desired display should look similar to the bottom trace shown in Figure 24.
12. Plot the oscilloscope display and record the information indicated on TDS 17. Label the plot Channel 8 and attach the plot to TDS 17.
13. Connect channel 1 of the oscilloscope to pins J4-14 (High) and J4-26 (Low). Optimize time and amplitude for best resolution. The desired display should look similar to the bottom trace shown in Figure 24.
14. Plot the oscilloscope display and record the information indicated on TDS 17. Label the plot Channel 9 and attach the plot to TDS 17.
15. Connect channel 1 of the oscilloscope to pins J4-27 (High) and J4-26 (Low). Optimize time and amplitude for best resolution. The desired display should look similar to the bottom trace shown in Figure 24.
16. Plot the oscilloscope display and record the information indicated on TDS 17. Label the plot Channel 10 and attach the plot to TDS 17.
17. Connect channel 1 of the oscilloscope to pins J4-28 (High) and J4-26 (Low). Optimize time and amplitude for best resolution. The desired display should look similar to the bottom trace shown in Figure 24.
18. Plot the oscilloscope display and record the information indicated on TDS 17. Label the plot Channel 11 and attach the plot to TDS 17.
19. Connect channel 1 of the oscilloscope to pins J4-29 (High) and J4-26 (Low). Optimize time and amplitude for best resolution. The desired display should look similar to the bottom trace shown in Figure 24.
20. Plot the oscilloscope display and record the information indicated on TDS 17. Label the plot Channel 12 and attach the plot to TDS 17.
21. Connect channel 1 of the oscilloscope to pins J4-30 (High) and J4-26 (Low). Optimize time and amplitude for best resolution. The desired display should look similar to the bottom trace shown in Figure 24.
22. Plot the oscilloscope display and record the information indicated on TDS 17. Label the plot Channel 13 and attach the plot to TDS 17.
23. Connect channel 1 of the oscilloscope to pins J4-31 (High) and J4-26 (Low). Optimize time and amplitude for best resolution. The desired display should look similar to the bottom trace shown in Figure 24.
24. Plot the oscilloscope display and record the information indicated on TDS 17. Label the plot Channel 14 and attach the plot to TDS 17.

25. Connect channel 1 of the oscilloscope to pins J4-32 (High) and J4-26 (Low). Optimize time and amplitude for best resolution. The desired display should look similar to the bottom trace shown in Figure 24.
26. Plot the oscilloscope display and record the information indicated on TDS 17. Label the plot Channel 15 and attach the plot to TDS 17.

**3.3.6.5 PLO #1 and PLO #2 lock test point verification.** Perform the following procedures.

1. Look to see that PLO #1 is enabled. If not enter STE command "PLO POWER". Wait for the screen to show PLO #1 active.
2. Connect DVM to pins J4-22 (High) and J4-4 (Low). If the PLO is locked, the voltage observed will be less than or equal to  $\pm 1$  volt. If the PLO is unlocked, the voltage observed will be approximately  $-15 \pm 1$  volt.
3. Record voltage on TDS 18.
4. Enter STE command "PLO POWER". Wait for the screen to show PLO #2 active.
5. Connect DVM to pins J4-3 (High) and J4-4 (Low). If the PLO is locked, the voltage observed will be less than or equal to  $\pm 1$  volt. If the PLO is unlocked, the voltage observed will be approximately  $-15 \pm 1$  volt.
6. Record voltage on TDS 18.

**3.3.6.6 GSE-1 mode verification.** This test mode positions the reflectors at beam position 6 for 10 integration periods, then to the cold calibration position for 10 integration periods, and finally to the warm cal position for 10 integration periods. This process is then repeated. To verify this mode, perform the following procedures. Look at ENGINEERING DATA, also UNPOWERED THERMISTORS prior to starting these modes.

1. Enter a "1" on the mode switch located on the front of the STE test panel (refer to Figure 2 for test panel location).
2. From the STE command screen shown in Figure 11, enter the STE command "[ 21 ] GSE MODE".
3. Wait 18 seconds, and look to see that the unit is performing the scan pattern described. Enter the observed result on TDS 19.
4. Enter the STE command "[ 3 ]" to obtain a full printout. Review the following data and record the results on TDS 19.
  - a. Packet ID (elements 1 and 2, page 1 of printout)
  - b. Packet length (elements 3 and 4, page 1 of printout)
  - c. Unit serial number (elements 5 and 6, page 1 of printout)
  - d. Instrument mode/.status (elements 7 and 8, page 1 of printout)
  - e. Reflector positions (1<sup>st</sup> 10 at beam position 6, 2<sup>nd</sup> 10 at cold cal position, 3<sup>rd</sup> 10 at warm cal position, ignore cold cal and warm cal positions on the printout) (pages 1 - 6 of printout)
  - f. Radiometer scene data (pages 1 - 6 of printout)
  - g. PRT temperature data (elements 1090 - 1180, page 7 of printout)

- h. Status (page 8 of printout)
  - i. Engineering data (page 8 of printout).
5. Attach the printout to TDS 19. There is no Pass/Fail criteria.

**3.3.6.7 GSE-2 mode verification.** This test mode positions the reflectors at beam position 1 for 30 integration periods. This process is then repeated. To verify this mode, perform the following procedures.

1. Enter a "2" on the mode switch located on the front of the STE test panel.
2. Wait 18 seconds, and look to see that the unit is performing the scan pattern described. Enter the observed result on TDS 18.
3. Enter the STE command "[ 3 ]" to obtain a full printout. Review the following data and record the results on TDS 18.
  - a. Packet ID (elements 1 and 2, page 1 of printout)
  - b. Packet length (elements 3 and 4, page 1 of printout)
  - c. Unit serial number (elements 5 and 6, page 1 of printout)
  - d. Instrument mode/status (elements 7 and 8, page 1 of printout)
  - e. Reflector positions (30 positions at beam position 1, ignore cold cal and warm cal positions on the printout) (pages 1 - 6 of printout)
  - f. Radiometer scene data (pages 1 - 6 of printout)
  - g. PRT temperature data (elements 1090 - 1180, page 7 of printout)
  - h. Status (page 8 of printout)
  - i. Engineering data (page 8 of printout).
4. Attach the printout to TDS 18. There is no Pass/Fail criteria.

**3.3.6.8 GSE-3 mode verification.** This test mode positions the reflectors at each beam position for 30 integration periods incrementing the beam position to the next beam position each 8 seconds. This process is then repeated. To verify this mode, perform the following procedures.

1. Enter a "3" on the mode switch located on the front of the STE test panel.
2. Wait 18 seconds, and look to see that the unit is performing the scan pattern described. Enter the observed result on TDS 19.
3. Enter the STE command "[ 3 ]" to obtain a full printout. Review the following data and record the results on TDS 19.
  - a. Packet ID (elements 1 and 2, page 1 of printout)
  - b. Packet length (elements 3 and 4, page 1 of printout)
  - c. Unit serial number (elements 5 and 6, page 1 of printout)

- d. Instrument mode/status (elements 7 and 8, page 1 of printout)
  - e. Reflector positions (30 positions at beam position when printout obtained, ignore cold cal and warm cal positions on the printout) (pages 1 - 6 of printout)
  - f. Radiometer scene data (pages 1 - 6 of printout)
  - g. PRT temperature data (elements 1090 - 1180, page 7 of printout)
  - h. Status (page 8 of printout)
  - i. Engineering data (page 8 of printout).
4. Attach the printout to TDS 19. There is not Pass/Fail criteria.

**3.3.6.9 GSE-4 mode verification.** This test mode positions the reflectors at beam position 30 for 30 integration periods. This process is then repeated. To verify this mode, perform the following procedures.

1. Enter a "4" on the mode switch located on the front of the STE test panel.
2. Wait 18 seconds, and look to see that the unit is performing the scan pattern described. Enter the observed result on TDS 19.
3. Enter the STE command "[ 3 ]" to obtain a full printout. Review the following data and record the results on TDS 19.
  - a. Packet ID (elements 1 and 2, page 1 of printout)
  - b. Packet length (elements 3 and 4, page 1 of printout)
  - c. Unit serial number (elements 5 and 6, page 1 of printout)
  - d. Instrument mode/status (elements 7 and 8, page 1 of printout)
  - e. Reflector positions (30 positions at beam position 30, ignore cold cal and warm cal positions on the printout) (pages 1 - 6 of printout)
  - f. Radiometer scene data (pages 1 - 6 of printout)
  - g. PRT temperature data (elements 1090 - 1180, page 7 of printout)
  - h. Status (page 8 of printout)
  - i. Engineering data (page 8 of printout).
4. Attach the printout to TDS 19. There is no Pass/Fail criteria.

**3.3.6.10 GSE-5 mode verification.** This test mode positions the reflectors at beam position 6 for 39 integration periods. This process is then repeated. To verify this mode, perform the following procedures.

1. Enter a "5" on the mode switch located on the front of the STE test panel.
2. Wait 18 seconds, and look to see that the unit is performing the scan pattern described. Enter the observed result on TDS 19.

3. Enter the STE command “[ 3 ]” to obtain a full printout. Review the following data and record the results on TDS 19.
  - a. Packet ID (elements 1 and 2, page 1 of printout)
  - b. Packet length (elements 3 and 4, page 1 of printout)
  - c. Unit serial number (elements 5 and 6, page 1 of printout)
  - d. Instrument mode/status (elements 7 and 8, page 1 of printout)
  - e. Reflector positions (30 positions at beam position 6, ignore cold cal and warm cal positions on the printout) (pages 1 - 6 of printout)
  - f. Radiometer scene data (pages 1 - 6 of printout)
  - g. PRT temperature data (elements 1090 - 1180, page 7 of printout)
  - h. Status (page 8 of printout)
  - i. Engineering data (page 8 of printout).
4. Attach the printout to TDS 19. There is no Pass/Fail criteria.

**3.3.6.11 GSE-7 mode verification.** This test mode is used in conjunction with GSE-3 mode to pause the reflector at the current beam position for 30 integration periods. This process is then repeated. To verify this mode, perform the following procedures.

1. Enter a “7” on the mode switch located on the front of the STE test panel.
2. Wait 18 seconds, and look to see that the unit is performing the scan pattern described. Enter the observed result on TDS 19.
3. Enter the STE command “[ 3 ]” to obtain a full printout. Review the following data and record the results on TDS 19.
  - a. Packet ID (elements 1 and 2, page 1 of printout)
  - b. Packet length (elements 3 and 4, page 1 of printout)
  - c. Unit serial number (elements 5 and 6, page 1 of printout)
  - d. Instrument mode/status (elements 7 and 8, page 1 of printout)
  - e. Reflector positions (30 positions at current beam position, ignore cold cal and warm cal positions on the printout) (pages 1 - 6 of printout)
  - f. Radiometer scene data (pages 1 - 6 of printout)
  - g. PRT temperature data (elements 1090 - 1180, page 7 of printout)
  - h. Status (page 8 of printout)
  - i. Engineering data (page 8 of printout).

4. Attach the printout to TDS 19. There is no Pass/Fail criteria.

**3.3.7 Radiometer functional performance test.** The purpose of this test is to verify the radiometric performance of the AMSU-A1 instrument at the system level. This test consists of:

1. PLO frequency measurements (3.3.7.1)
2. Relative radiometer NE $\Delta$ T measurements (3.3.7.2)

**3.3.7.1 PLO frequency measurements.** Perform the following procedures.

1. The unit should still be powered and configured as shown in Figure 12. The measurement feedhorn and mixer (items 16 and 17 from Table I) should be positioned looking into the A1-1 reflector when the reflector is looking at the cold scene position.
2. Enter the STE command “[ 11 ] ANTENNA COLD CAL MODE”. Wait 18 seconds before issuing the next command.
3. Both reflectors should be positioned looking at the cold calibration position and PLO #2 should be active. Wait at least 1 hour for the instrument to stabilize.
4. Record the frequency measured for PLO #2 on TDS 20. Attach a plot of the spectrum analyzer display labeled PLO #2 to TDS 20. A sample display is shown in Figure 25.
5. Enter the STE command “[ 15 ] PLO POWER”.
6. Both reflectors should be positioned looking at the cold calibration position and PLO #1 should now be active. Wait at least 1 hour for the instrument to stabilize.
7. Record the frequency measured for PLO #1 on TDS 20. Attach a plot of the spectrum analyzer display labeled PLO #1 to TDS 20.
8. Remove the feedhorn, mixer, and spectrum analyzer leaving the rest of the setup powered and intact for the next section.

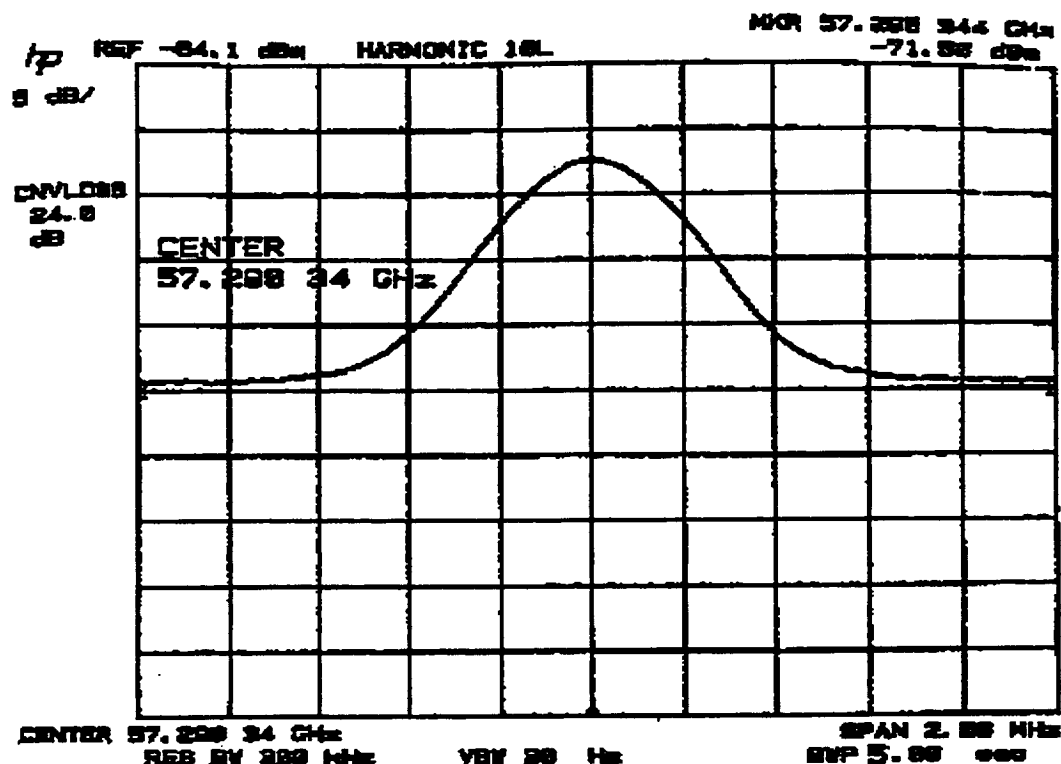


Figure 25. Typical Spectrum Analyzer Plot of PLO Frequency

**3.3.7.2 Relative radiometer NEAT measurements.** The purpose of this test is to perform a preliminary evaluation of the radiometer NEAT at the system level. Since the STE is not in the thermal vacuum configuration, no temperature readings from the cold load are available. To compute the NEAT for this test, the temperature used for the cold load temperature shall be 80 K.

The data obtained from this test are considered as relative NEAT and are to be used as a diagnostic tool to verify proper operation of each radiometer channel from antenna input to the spacecraft interface. The equation to determine relative NEAT is as follows:

$$NEAT = \frac{[SD * (T_h - T_c)]}{M - N}$$

- where
- SD = Standard deviation of 120 radiometric samples looking at the warm load
  - T<sub>h</sub> = Physical temperature of the warm load (300 K)
  - T<sub>c</sub> = Physical temperature of the cold target (80 K)
  - M = Average of the radiometric readings in counts viewing the warm load (120 samples)
  - N = Average of the radiometric readings in counts viewing the cold target (30 samples).

Perform the following procedures:

#### WARNING

The use of liquid nitrogen in a confined poorly ventilated area can cause asphyxiation and death due to lack of oxygen (oxygen concentration below 20 percent). Accidental contact with liquid nitrogen will cause severe frostbite to the eyes or skin. When handling liquid nitrogen, personnel shall observe the following safety precautions:

- a. Ensure that the work area is well ventilated to prevent excessive gas buildup.
  - b. To protect your eyes always wear a face shield or safety goggles (safety glasses without side shields do not provide adequate protection).
  - c. To protect exposed skin, always wear an apron when pouring LN2 and whenever exposed to LN2, always wear a lab coat, gloves made for cryogenic work, cuffless trousers (worn outside the boots or shoes), and safety shoes.
  - d. Do not fill target fuller than 1.0 inch from the top. Fill target at the floor level, away from unit.
  - e. Do not move filled target without cover in place.
1. The unit should still be powered and configured as shown in Figure 12. The unit should already be in a stabilized state with PLO #1 active.
2. Enter the STE command “[ 11 ] ANTENNA FULL SCAN MODE”.
3. After the unit is stabilized (minimum of 30 minutes required), fill the cold targets with liquid nitrogen and position them as shown in Figure 26.
4. Enter the STE command “[ 1 ] RETURN” twice to return to the EOS/AMSU-A1 STE main screen shown in Figure 9.
5. From the Main screen, enter the STE command “[ 13 ] FUNCTIONAL TEST”.
6. The STE then asks for “COLD TARGET POSITION... ENTER C=COLD, N=NADIR”. Enter “C” for cold.
7. No additional operator input is needed as the computer will automatically display the results. There is typically a 40 second delay after executing a functional test before the results are displayed. A typical screen is shown in Figure 27.
8. Obtain a screen printout by issuing the STE command “[ 2 ]”.
9. Repeat steps 5 through 8 four more times obtaining four additional screen printouts. Average the  $NE\Delta T$  readings from the five printouts for each channel and enter those averages on TDS 21. Attach the printouts to TDS 21.
10. Go to the Commands screen on the STE. From the main screen shown in Figure 9, enter a [ 2 ] and then a [ 14 ].



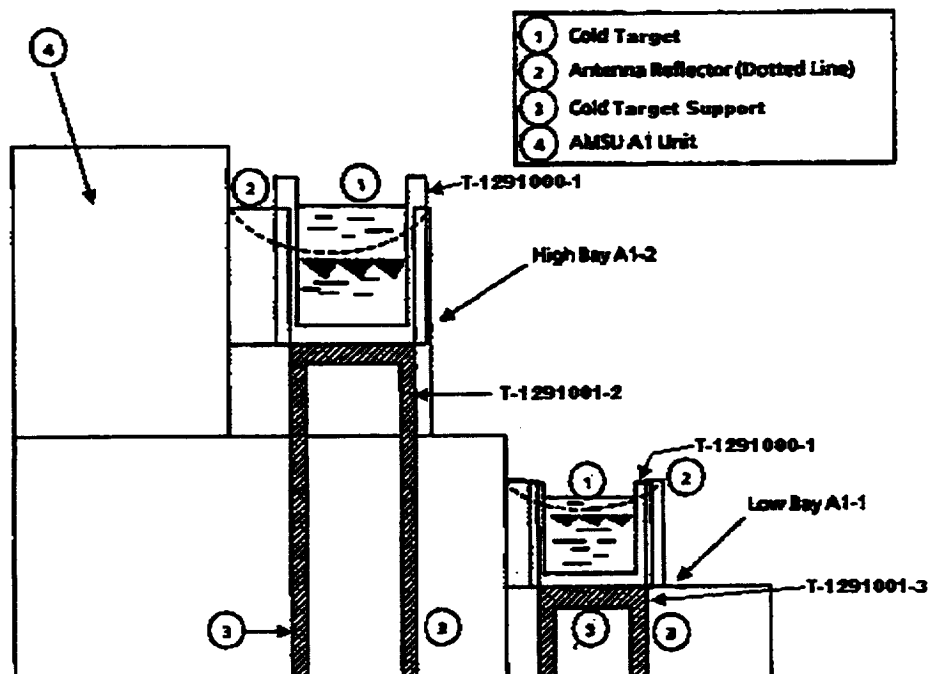


Figure 26. Relative NEAT Test Setup

CH	WARM TEMP.	WARM COUNTS	COLD COUNTS	GAIN	DELTA-T
3	297.45	16558.0	13752.0	0.069	0.623
4	297.44	16317.0	13108.0	0.061	0.556
5	"	"	"	"	"
6	"	"	"	"	"
7	"	"	"	"	"
8	"	"	"	"	"
9	"	"	"	"	"
10	"	"	"	"	"
11	"	"	"	"	"
12	"	"	"	"	"
13	"	"	"	"	"
14	"	"	"	"	"
15	"	"	"	"	"

Figure 27. Typical Screen Display Following a Functional Test

11. Enter the STE command “[ 15 ] PLO POWER” to change from PLO #1 to PLO #2. Wait at least 30 minutes to allow the unit to stabilize after changing to PLO #2.
12. Change out the cold targets for newly filled cold targets if available. If new targets are unavailable, refill the old targets and wipe off the front surface of the targets to remove any ice or water before proceeding.
13. Repeat steps 5 through 9 to obtain data using PLO #2.
14. Remove the cold loads and associated hardware.
15. Turn the STE power supply panel N/PULSE switch off (refer to Figure 3).
16. Turn the STE power supply panel Q/MAIN switch off (refer to Figure 3).
17. Turn the STE power supply panel MAIN POWER switch off (refer to Figure 3).

**3.3.8 Channel identification test.** The purpose of the channel identification test is to verify the proper final configuration/assembly of each radiometer channel from antenna input to the spacecraft interface.

1. Configure the unit and test equipment as shown in Figure 28.
2. Connect the STE to instrument using the following STE interface cables.
  - a. STE interface cable J1 (1356648-1)
  - b. STE interface cable J2 (1356648-2)
  - c. STE interface cable J3 (1356648-3)
  - d. STE interface cable J4 (1356648-4)
3. Turn the STE main power switch ON. From the A1 directory, and at the “\$” prompt, enter the command to the STE “RUN EI.” The A1 software program should be running as evidenced by the STE screen shown in Figure 9.
4. Turn the STE power supply panel main power switch ON (refer to Figure 3).
5. Turn the STE power supply panel Q/Main switch ON (refer to Figure 3).
6. Turn the STE power supply panel N/pulse switch ON (refer to Figure 3).
7. From the main screen shown in Figure 9, enter the STE command [2] “MONITOR ONLY.” The screen should now be as shown in Figure 10. Enter the STE command “[14] COMMANDS.” The screen should now be as shown in Figure 11.
8. Enter the STE command “SCANNER A1-1 POWER.” Wait 18 seconds before issuing the next command.
9. Enter the STE command “SCANNER A1-2 POWER.” Wait 18 seconds before issuing the next command.
10. Enter the STE command “ANTENNA COLD CAL.” Wait 18 seconds before issuing the next command. Both reflectors should scan to the cold calibration beam position.
11. Enter the STE command “[1] RETURN” to return to the monitor only screen shown in Figure 10.

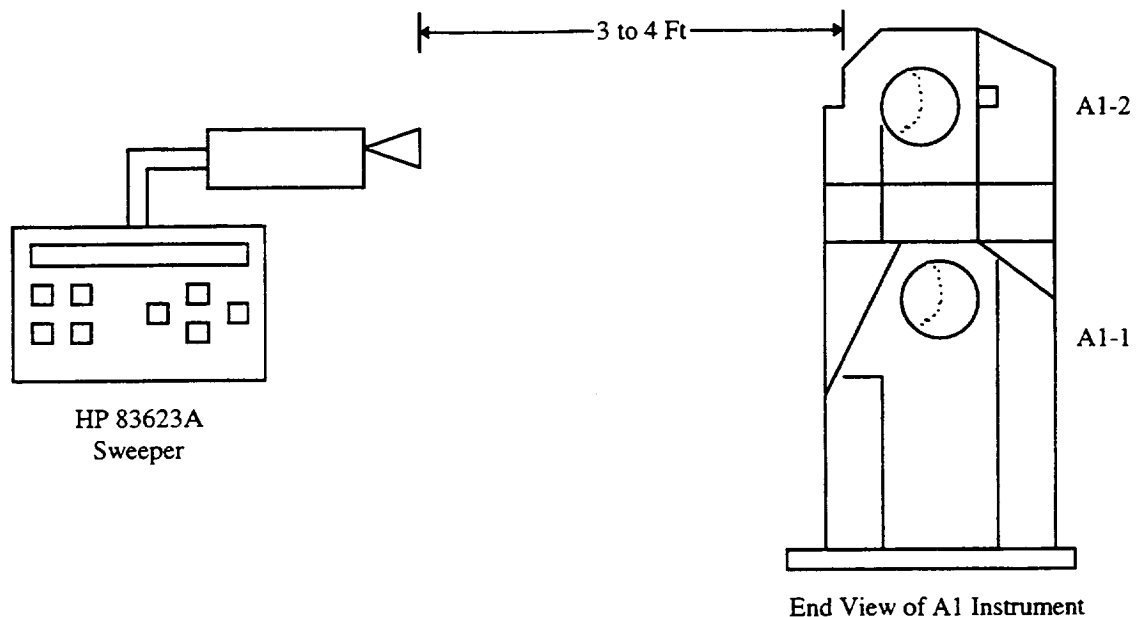


Figure 28. Channel Identification Set Up

12. Enter the STE command "[5] SCIENCE DATA." The STE should now display the science data screen shown in Figure 29. From this screen enter the STE command "[9] BEAM POSITION NN-ALL CHANNELS."
13. The STE then prompts "ENTER BEAM POSITION NO (1 TO 30)." Enter "30" to show the radiometric counts data for channels 3-15. The STE should now display the radiometric data screen shown in Figure 30 except with a different set of count data.
14. Allow the instrument to stabilize for approximately 20 minutes. Enter the STE command "[2]" to obtain a screen only printout.
15. Configure the unit and test equipment as shown in Figure 28. Turn ON the sweeper and allow to warm up approximately 10 minutes. Make sure that the RF power is OFF during sweeper warm up.

**CAUTION**

Extreme care must be used when turning on RF power. When RF power is first applied the multiplier/gain horn should be approximately three to four feet from the unit. The RF power setting should be no greater than -20 dBm.

16. Set the sweeper frequency to  $50.35 + .01$  GHz and set the RF power level to -20 dBm. Position the multiplier/gain horn three to four feet from the instrument so that the A1-2 antenna and gain horn are approximately aligned. Rotate the gain horn, if needed, to the vertical polarization position.
17. Turn ON the RF power making sure the power level is set to -20 dBm. Allow the multiplier to warm up approximately five minutes.

```

EOS A1-03 EI.EXE;31 COLD CAL MODE PI 5-JUN-98 09:36:59 SCAN NUMBER 34
[ 5 ]    SCIENCE DATA ELEMENT 0000
[ 6 ]    CONTROL/STATUS ELEMENT 00
[ 7 ]    ENGINEERING ELEMENT 00
[ 8 ]    DATA STREAM (64 VALUES)
[ 9 ]    BEAM POSITION NN - ALL CHANNELS
[ 10 ]   CHANNEL NN - ALL BEAM POSITIONS
[ 11 ]   WARM CALIBRATE
[ 12 ]   COLD CALIBRATE
[ 13 ]   REFLECTOR POSITIONS
[ 14 ]   TEMPERATURE DATA (16 VALUES)

ENGR OK   POWER    ON      CHECKSUM IN 15A1 SA28  34SA29      47
          SCREEN ONLY [ 2 ]    PRINT [ 3 ] FULL    [ 1 ] RETURN
SELECT BUTTON 2

```

Figure 29. Science Data Screen

```

EOS ' A1-03 EI.EXE;31 COLD CAL MODE PI 5-JUN-98 09:49:07SCAN NUMBER 11
[ 5 ]    SCIENCE DATA ELEMENT 0000
[ 6 ]    CONTROL/STATUS ELEMENT 00
[ 7 ]    ENGINEERING ELEMENT 00

          RADIOMETRIC DATA
          BEAM POSITION 30
          CH    DATA    CH    DATA    CH    DATA
          3      15798    8      15414    13     15811
          4      16252    9      16176    14     16029
          5      15661    10     16010    15     15102
          6      16413    11     15639
          7      18044    12     15817

[ 21 ] UP          [ 22 ] DOWN
ENGR OK   POWER    ON      CHECKSUM IN DF5D CALC DFSD SA28  47
          SCREEN ONLY [ 2 ]    PRINT [ 3 ] FULL    [ 1 ] RETURN
SELECT BUTTON 2

```

Figure 30. Radiometric Data Screen

18. At the STE screen, compare the radiometric data counts of channel 3 to the counts printed out at step 14. Enter the STE command "[2]" to obtain a screen only printout.
19. From the printouts obtained in steps 14 and 18 verify that the radiometric data counts for channel 3 have increased significantly, approximately 10,000 or more, and that the other channels data counts have remained relatively unchanged, less than 300 counts.
20. Record the counts difference on TDS 22 of channel 3 from the printouts obtained in steps 18 and 14 and attach printouts to TDS 22.
21. Repeat steps 16 through 20 for the frequencies and polarizations listed on TDS 22.
22. After all A1 channels have been identified, turn OFF the RF power. Return the reflectors to the warm cal position.
23. Turn the STE Q/Main and N/Pulse switches to OFF
24. Turn the STE power supply panel main power switch OFF.

This page intentionally left blank.

#### 4. QUALITY ASSURANCE PROVISIONS

**4.1 Responsibility for inspection.** Aerojet Quality Assurance shall inspect in accordance with the requirements of this test procedure, S-480-80 and S-480-79. Quality Control shall verify all test set-ups prior to start of test. Bonded software shall be used for all tests and shall be obtained from Quality Control. Quality Control shall review all test data for conformance to success criteria. The test data shall include test limits. For tests that satisfy requirements from S-480-80 on protoflight and flight units, customer representatives shall be invited to monitor tests and shall be invited to review the data and show approval on the test data sheets.

**4.1.1 Test facilities.** Unless otherwise specified, the examinations and tests described herein shall be conducted at Aerojet, Azusa Operations, Azusa, California.

**4.1.2 Electrostatic device (ESD) handling.** All electronic hardware shall be handled in accordance with Aerojet Standard STD-2454.

**4.2 Monitoring procedures.** All tests in this procedure shall be witnessed by Quality Control.

**4.2.1 Test equipment.** Test equipment calibration procedures shall comply with the requirements of MIL-STD-45662.

**4.2.2 Software.** Bonded software shall be used at all times.

**4.3 Monitoring procedures for materials.** Not applicable.

**4.4 Certification.** Certification for handling ESD sensitive equipment is required for all personnel working on the assembly and test of the AMSU-A instrument.

#### 4.5 Test methods

**4.5.1 Accept-reject criteria.** The accept-reject criteria for each examination or test shall be as specified in the data sheets included in each phase of the applicable test procedure. The test results shall be recorded on the data sheets to demonstrate compliance with the applicable specification requirements. Methods of analysis shall be appropriate for the parameters being inspected. It shall be the responsibility of Aerojet to review the test data and determine conformance of the unit under test to the performance requirements contained in S-480-80 and this specification.

In the event of a failure during any phase of this test procedure, the test activity shall record the required information on the Test Anomaly Report and alert the design assurance and quality engineers. Except for failures which only represent a limited out-of-tolerance condition for a particular parameter and are not expected to interfere with the balance of the testing and which are non-destructive, the testing must be stopped until a complete description of the observed anomaly failure is documented and a Failure Analysis Strategy (FAS) is formulated, documented, and implemented to preclude loss of information or evidence that may facilitate determining the failure cause. The full set of data from the referenced tests are required in order to formulate a plan of action. The cognizant reliability engineer, quality assurance engineer, and the system or responsible test engineer shall jointly develop the FAS which must be approved by Design Assurance and Quality Assurance. Analysis and reporting shall be performed in accordance with Aerojet procedures.

**4.5.2 General.** Separate test reports shall be prepared in accordance with 4.5.2.1.1 for each series which has successfully completed testing. This report shall include all data sheets associated with the tests on the unit plus the data reduction and analysis of specific parameters required by each applicable test procedure specification obtained from screen printouts and plots, oscilloscope photographs, or magnetic recordings. During tests in which a CRT screen is to be printed or plotted and retained as a data sheet, the following annotation shall be applied:

19 Aug 98

Test/Systems Engineer:

\_\_\_\_\_  
(Signature)

Quality Control:

\_\_\_\_\_  
(Signature)

Customer Representative:

(Flight hardware only)

\_\_\_\_\_  
(Signature)

Date:

Test Paragraph No.:

Subassembly/Assembly Serial No.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The report shall also include a certification statement. A complete copy of the report shall be included in the shop order package.

#### **4.5.2.1 Acceptance test reports**

**4.5.2.1.1 Format.** The acceptance test report shall be prepared and shall include, as a minimum, the following:

- a. Title page
- b. Summary
- c. Requirements satisfied (if any)
- d. Discrepancy reports (if any)
- e. Test data

**4.5.2.1.2 Test data.** The test data included in the report shall be that which was obtained during performance of the tests specified herein and recorded on the Test Data Sheet(s) (TDS) (see Appendix A) and on printouts and plots.



## 5. NOTES

**5.1 *Intended use.*** The intended use of this process specification is to establish the requirements for the comprehensive and limited performance testing of the Advanced Microwave Sounding Unit - A1 System.

### 5.2 *Abbreviations and acronyms*

AMSU	Advanced Microwave Sounding Unit
BW	Bandwidth
C	Celsius
CAL	Calibration
CCA	Circuit Card Assembly
CH	Channel
CPT	Comprehensive Performance Test
DMM	Digital Multimeter
DRB	Decade Resistor Box
DVM	Digital Voltmeter
ESD	Electrostatic Discharge
F	Fail
FAS	Failure Analysis Strategy
GND	Ground
GPIB	General Purpose Interface Bus
GSFC	Goddard Space Flight Center
HP	Hewlett-Packard
HTR	Heater
I/O	Input/Output
IF	Intermediate Frequency
K	Degrees Kelvin
LO	Local Oscillator
LPT	Limited Performance Test
max	Maximum
MUX	Multiplexer
NF	Noise Figure
P	Pass
P/N	Part Number
PRT	Platinum Resistance Transducer
RF	Radio Frequency
RTN	Return
S/N	Serial Number
STE	Special Test Equipment

AE-26156/9A  
19 Aug 98

TDS	Test Data Sheet
TLM	Telemetry
TAR	Test Anomaly Report

## APPENDIX A

### TEST DATA SHEETS

#### 10. APPENDIX A

10.1 *Scope.* This appendix contains the test data sheets for all tests and inspections listed in section 3.

TDS	Page
1	Grounding Interface Test.....A-2
2	Quiet Power Bus Operational Power Test .....A-8
3	Quiet Power Bus Operational Power Test (LPT) .....A-9
4	Quiet Power Bus Turn On Transient Test.....A-10
5	Noisy Power Bus Operational Power Test.....A-11
6	Noisy Power Bus Turn On Transient Test.....A-12
7	Passive Analog Interface Test.....A-13
8	Instrument Commanding Test.....A-14
9	Science and Engineering Data Test (Full Scan Mode) .....A-15
10	Science and Engineering Data Test (Warm Cal Mode).....A-18
11	Science and Engineering Data Test (Cold Cal Mode).....A-20
12	Science and Engineering Data Test (Nadir Mode) .....A-25
13	Noisy Bus Current Measurement During Warm Cal, Cold Cal and Nadir) .....A-27
14	1553 Bus Interface Test.....A-28
15	Test Point Interface Test (8 Second Sync Pulse TP) .....A-29
16	Test Point Interface Test (Integrate/Hold and Dump TPs) .....A-30
17	Test Point Interface Test (Radiometer Channel Analog Output TPs).....A-31
18	Test Point Interface Test (PLO #1 and PLO #2 Lock TPs) .....A-32
19	Test Point Interface Test (GSE Modes).....A-33
20	Radiometer Functional Performance Test (PLO Frequency Measurements).....A-34
21	Radiometer Functional Performance Test (Relative NEAT Measurements*) .....A-35
22	Channel Identification Test.....A-37

19 Aug 98

**TEST DATA SHEET NO. 1** (Sheet 1 of 6)  
Grounding Interface Test (Paragraph 3.3.2, Step 2)

J1 of Spacecraft Interface				
From Chassis Ground to	Pin Description	Required Resistance (Ohms)	Measured Value (Ohms)	Pass/Fail
J1-1	+29V QUIET PWR BUS	> 1M		
J1-2	+29V QUIET PWR BUS	> 1M		
J1-3	29V QUIET BUS RTN	> 1M		
J1-4	29V QUIET BUS RTN	> 1M		
J1-5	+29V NOISY PWR BUS	> 1M		
J1-6	+29V NOISY PWR BUS	> 1M		
J1-7	29V NOISY BUS RTN	> 1M		
J1-8	29V NOISY BUS RTN	> 1M		
J1-9	SURVIVAL PWR BUS A	> 1M		
J1-10	SURVIVAL BUS A RTN	> 1M		
J1-11	SURVIVAL PWR BUS A	> 1M		
J1-12	SURVIVAL BUS A RTN	> 1M		
J1-13	CHASSIS GROUND	< 1		
J1-14	+29V QUIET PWR BUS	> 1M		
J1-15	+29V QUIET PWR BUS	> 1M		
J1-16	29V QUIET BUS RTN	> 1M		
J1-17	29V QUIET BUS RTN	> 1M		
J1-18	+29V NOISY PWR BUS	> 1M		
J1-19	+29V NOISY PWR BUS	> 1M		
J1-20	29V NOISY BUS RTN	> 1M		
J1-21	29V NOISY BUS RTN	> 1M		
J1-22	SURVIVAL PWR BUS B	> 1M		
J1-23	SURVIVAL BUS B RTN	> 1M		
J1-24	SURVIVAL PWR BUS B	> 1M		
J1-25	SURVIVAL BUS B RTN	> 1M		

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_    S/N: \_\_\_\_\_  
 Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_    LPT \_\_\_\_\_

\_\_\_\_\_  
 Test Systems Engineer                      Date

\_\_\_\_\_  
 Customer Representative                      Date

\_\_\_\_\_  
 Quality Control                                      Date

**TEST DATA SHEET NO. 1** (Sheet 2 of 6)  
Grounding Interface Test (Paragraph 3.3.2, Step 2)

J2 of Spacecraft Interface				
From Chassis Ground to	Pin Description	Required Resistance (Ohms)	Measured Value (Ohms)	Pass/Fail
J2-1	A1-1 MOTOR TEMP HI	> 1M		
J2-2	A1-1 MOTOR TEMP LO	> 1M		
J2-3	A1-1 RECEIVER TEMP 1 HI	> 1M		
J2-4	A1-1 RECEIVER TEMP 1 LO	> 1M		
J2-5	A1-1 WARM LOAD TEMP HI	> 1M		
J2-6	A1-1 WARM LOAD TEMP LO	> 1M		
J2-7	A1-2 MOTOR TEMP HI	> 1M		
J2-8	A1-2 MOTOR TEMP LO	> 1M		
J2-9	A1-2 RECEIVER TEMP 1 HI	> 1M		
J2-10	A1-2 RECEIVER TEMP 1 LO	> 1M		
J2-11	A1-2 WARM LOAD TEMP HI	> 1M		
J2-12	A1-2 WARM LOAD TEMP LO	> 1M		
J2-13	No Connection	> 1M		
J2-14	No Connection	> 1M		
J2-15	No Connection	> 1M		
J2-16	No Connection	> 1M		
J2-17	No Connection	> 1M		
J2-18	No Connection	> 1M		
J2-19	No Connection	> 1M		
J2-20	No Connection	> 1M		
J2-21	No Connection	> 1M		
J2-22	A1-1 RECEIVER TEMP 2 HI	> 1M		
J2-23	A1-1 RECEIVER TEMP 2 LO	> 1M		
J2-24	No Connection	> 1M		
J2-25	No Connection	> 1M		
J2-26	No Connection	> 1M		
J2-27	No Connection	> 1M		
J2-28	A1-2 RECEIVER TEMP 2 HI	> 1M		
J2-29	A1-2 RECEIVER TEMP 2 LO	> 1M		
J2-30	No Connection	> 1M		
J2-31	No Connection	> 1M		
J2-32	No Connection	> 1M		
J2-33	No Connection	> 1M		
J2-34	No Connection	> 1M		
J2-35	No Connection	> 1M		
J2-36	No Connection	> 1M		
J2-37	No Connection	> 1M		

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_ S/N: \_\_\_\_\_  
 Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_ LPT \_\_\_\_\_

Customer Representative    Date

Test Systems Engineer    Date

Quality Control    Date

**TEST DATA SHEET NO. 1** (Sheet 3 of 6)  
Grounding Interface Test (Paragraph 3.3.2, Step 2)

J3 of Spacecraft Interface				
From Chassis Ground to	Pin Description	Required Resistance (Ohms)	Measured Value (Ohms)	Pass/Fail
J3-1	1553 INTERFACE DATA A HI	> 100K		
J3-2	1553 INTERFACE DATA A LO	> 100K		
J3-3	No Connection	> 1M		
J3-4	1553 INTERFACE DATA B LO	> 100K		
J3-5	1553 INTERFACE DATA B HI	> 100K		
J3-6	1553 INTERFACE DATA A SHIELD	< 1		
J3-7	No Connection	> 1M		
J3-8	No Connection	> 1M		
J3-9	1553 INTERFACE DATA B SHIELD	< 1		

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_ S/N: \_\_\_\_\_  
 Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_ LPT \_\_\_\_\_

\_\_\_\_\_  
Customer Representative                      Date

\_\_\_\_\_  
Test Systems Engineer                      Date

\_\_\_\_\_  
Quality Control                      Date

**TEST DATA SHEET NO. 1** (Sheet 4 of 6)  
Grounding Interface Test (Paragraph 3.3.2, Step 2)

J4 of Spacecraft Interface				
From Chassis Ground to	Pin Description	Required Resistance (Ohms)	Measured Value (Ohms)	Pass/Fail
J4-1	CHASSIS GROUND	< 1		
J4-2	8 SECOND SYNC PULSE TP	> 20K		
J4-3	PLO #2 LOCK TP	> 10K		
J4-4	PLO LOCK RTN (7/8)	< 2		
J4-5	I/H & DUMP RTN (2/3)	< 1		
J4-6	DUMP COMMAND TP	> 10K		
J4-7	No Connection	> 1M		
J4-8	CH 3 ANALOG OUT TP	> 100K		
J4-9	CH 4 ANALOG OUT TP	> 100K		
J4-10	CH 5 ANALOG OUT TP	> 100K		
J4-11	CH 6 ANALOG OUT TP	> 100K		
J4-12	CH 7 ANALOG OUT TP	> 100K		
J4-13	CH 8 ANALOG OUT TP	> 100K		
J4-14	CH 9 ANALOG OUT TP	> 100K		
J4-15	No Connection	> 1M		
J4-16	No Connection	> 1M		
J4-17	GSE COMMAND LSB	> 5K		
J4-18	GSE COMMAND MSB-1	> 5K		
J4-19	No Connection	> 1M		
J4-20	1.248 MHz CLOCK TP	> 100K		
J4-21	1.248 MHz CLOCK RTN (1)	< 1		
J4-22	PLO #1 LOCK TP	> 10K		
J4-23	No Connection	> 1M		
J4-24	I/H COMMAND TP	> 20K		
J4-25	No Connection	> 1M		
J4-26	ANALOG OUT RTN (2/3)	< 1		
J4-27	CH 10 ANALOG OUT TP	> 100K		
J4-28	CH 11 ANALOG OUT TP	> 100K		
J4-29	CH 12 ANALOG OUT TP	> 100K		
J4-30	CH 13 ANALOG OUT TP	> 100K		
J4-31	CH 14 ANALOG OUT TP	> 100K		
J4-32	CH 15 ANALOG OUT TP	> 100K		
J4-33	No Connection	> 1M		
J4-34	No Connection	> 1M		
J4-35	GSE COMMAND MSB	> 5K		
J4-36	GSE COMMAND RTN (1)	< 1		
J4-37	No Connection	> 1M		

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_ S/N: \_\_\_\_\_  
 Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_ LPT \_\_\_\_\_

\_\_\_\_\_  
Customer Representative                      Date

\_\_\_\_\_  
Test Systems Engineer                      Date

\_\_\_\_\_  
Quality Control                                      Date

**TEST DATA SHEET NO. 1** (Sheet 5 of 6)  
Grounding Interface Test (Paragraph 3.3.2, Step 2)

Source	Destination	Source Pin Description	Required Resistance (Ohms)	Measured Value (Ohms)	Pass/Fail*
J1-1	J1-2	+29V QUIET PWR BUS	<1		
J1-1	J1-14	+29V QUIET PWR BUS	<1		
J1-1	J1-15	+29V QUIET PWR BUS	<1		
J1-3	J1-4	29V QUIET BUS RTN	<1		
J1-3	J1-16	29V QUIET BUS RTN	<1		
J1-3	J1-17	29V QUIET BUS RTN	<1		
J1-5	J1-6	+29V NOISY PWR BUS	<1		
J1-5	J1-18	+29V NOISY PWR BUS	<1		
J1-5	J1-19	+29V NOISY PWR BUS	<1		
J1-7	J1-8	29V NOISY BUS RTN	<1		
J1-7	J1-20	29V NOISY BUS RTN	<1		
J1-7	J1-21	29V NOISY BUS RTN	<1		
J1-9	J1-11	SURVIVAL PWR BUS A	<1		
J1-10	J1-12	SURVIVAL BUS A RTN	<1		
J1-22	J1-24	SURVIVAL PWR BUS B	<1		
J1-23	J1-25	SURVIVAL BUS B RTN	<1		
J1-1	J1-5	+29V QUIET PWR BUS	> 1M		
J1-1	J1-7	+29V QUIET PWR BUS	> 1M		
J1-1	J1-9	+29V QUIET PWR BUS	> 1M		
J1-1	J1-10	+29V QUIET PWR BUS	> 1M		
J1-1	J1-22	+29V QUIET PWR BUS	> 1M		
J1-1	J1-23	+29V QUIET PWR BUS	> 1M		
J1-3	J1-5	29V QUIET BUS RTN	> 1M		
J1-3	J1-7	29V QUIET BUS RTN	> 1M		
J1-3	J1-9	29V QUIET BUS RTN	> 1M		

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_ S/N: \_\_\_\_\_  
 Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_ LPT \_\_\_\_\_

Customer Representative

Date

Test Systems Engineer

Date

Quality Control

Date



**TEST DATA SHEET NO. 1** (Sheet 6 of 6)  
Grounding Interface Test (Paragraph 3.3.2, Step 2)

Source	Destination	Source Pin Description	Required Resistance (Ohms)	Measured Value (Ohms)	Pass/Fail
J1-3	J1-10	29V QUIET BUS RTN	> 1M		
J1-3	J1-22	29V QUIET BUS RTN	> 1M		
J1-3	J1-23	29V QUIET BUS RTN	> 1M		
J1-5	J1-9	+29V NOISY PWR BUS	> 1M		
J1-5	J1-10	+29V NOISY PWR BUS	> 1M		
J1-5	J1-22	+29V NOISY PWR BUS	> 1M		
J1-5	J1-23	+29V NOISY PWR BUS	> 1M		
J1-7	J1-9	29V NOISY BUS RTN	> 1M		
J1-7	J1-10	29V NOISY BUS RTN	> 1M		
J1-7	J1-22	29V NOISY BUS RTN	> 1M		
J1-7	J1-23	29V NOISY BUS RTN	> 1M		
J1-9	J1-22	SURVIVAL PWR BUS A	> 1M		
J1-9	J1-23	SURVIVAL PWR BUS A	> 1M		
J1-10	J1-22	SURVIVAL BUS A RTN	> 1M		
J1-10	J1-23	SURVIVAL BUS A RTN	> 1M		
J1-13	J1 OUTER SHELL	CHASSIS GROUND	< 1		
J1-13	J2 OUTER SHELL	CHASSIS GROUND	< 1		
J1-13	J3 OUTER SHELL	CHASSIS GROUND	< 1		
J1-13	J4 OUTER SHELL	CHASSIS GROUND	< 1		
J3-1	J3-5	1553 INTERFACE DATA A HI	> 100K		
J3-1	J3-4	1553 INTERFACE DATA A HI	> 100K		
J3-2	J3-5	1553 INTERFACE DATA A LO	> 100K		
J3-2	J3-4	1553 INTERFACE DATA A LO	> 100K		

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_    S/N: \_\_\_\_\_  
Circle Test:    1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_    LPT \_\_\_\_\_

\_\_\_\_\_  
Customer Representative                      Date

\_\_\_\_\_  
Test Systems Engineer                      Date

\_\_\_\_\_  
Quality Control                      Date

**TEST DATA SHEET NO. 2**  
Quiet Power Bus Operational Power Test (Paragraph 3.3.3.1.1)

Required Quiet Bus Voltage QBV (Volts)	Measured QBV (Volts)	PLO	Maximum Peak Quiet Bus Current QBI (Amps)	Required Power (Watts)	Calculated Peak Power (QBV x QBI) (Watts)	Pass/Fail
26.95 - 27.05		#1		≤94		
28.95 - 29.05		#1		≤94		
30.95 - 31.05		#1		≤94		
26.95 - 27.05		#2		≤94		
28.95 - 29.10		#2		≤94		
30.95 - 31.05		#2		≤94		

Required Quiet Bus Voltage QBV (Volts)	Measured QBV (Volts)	PLO	Average Quiet Bus Current QBI (Amps)	Required Power (Watts)	Calculated Average Power (QBV x QBI) (Watts)	Pass/Fail
26.95 - 27.05		#1		≤86		
28.95 - 29.05		#1		≤86		
30.95 - 31.05		#1		≤86		
26.95 - 27.05		#2		≤86		
28.95 - 29.10		#2		≤86		
30.95 - 31.05		#2		≤86		

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_    S/N: \_\_\_\_\_  
Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_

Customer Representative

Date

Test Systems Engineer

Date

Quality Control

Date

**TEST DATA SHEET NO. 3**  
Quiet Power Bus Operational Power Test (LPT) (Paragraph 3.3.3.1.2)

Required Quiet Bus Voltage QBV (Volts)	Measured QBV (Volts)	Average Quiet Bus Current QBI (Amps)	Required Power (Watts)	Calculated Average Power (QBV x QBI) (Watts)	Pass/Fail
28.95 - 29.05			<86		

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_    S/N: \_\_\_\_\_  
LPT \_\_\_\_\_

\_\_\_\_\_  
Customer Representative                      Date

\_\_\_\_\_  
Test Systems Engineer                      Date

\_\_\_\_\_  
Quality Control                                      Date

**TEST DATA SHEET NO. 4**  
Quiet Power Bus Turn On Transient Test (Paragraph 3.3.3.1.3)

**+31 Volts**

Parameter	Measured/Calculated	Required	Pass/Fail
Peak Current	Amps	<10.6 Amps	
Pulse Width (Steady State)	ms	<250 msec	
Rate of Change(slope): dI/dT	ma/ $\mu$ s	<677 mA/ $\mu$ s	
Pulse Width (Transient)	ms	<100 msec	

**+29 Volts**

Parameter	Measured/Calculated	Required	Pass/Fail
Peak Current	Amps	<10.6 Amps	
Pulse Width (Steady State)	ms	<250 msec	
Rate of Change(slope): dI/dT	ma/ $\mu$ s	<677 mA/ $\mu$ s	
Pulse Width (Transient)	ms	<100 msec	

**+27 Volts**

Parameter	Measured/Calculated	Required	Pass/Fail
Peak Current	Amps	<10.6 Amps	
Pulse Width (Steady State)	ms	<250 msec	
Rate of Change(slope): dI/dT	ma/ $\mu$ s	<677 mA/ $\mu$ s	
Pulse Width (Transient)	ms	<100 msec	

EOS/AMSU-A1 System P/N: \_\_\_\_\_ Shop Order: \_\_\_\_\_ S/N: \_\_\_\_\_

Circle Test:    1st CPT    Final CPT    Sub CPT

\_\_\_\_\_  
Customer Representative                      Date

\_\_\_\_\_  
Test Systems Engineer                      Date

\_\_\_\_\_  
Quality Control                      Date

**TEST DATA SHEET NO. 5**  
Noisy Power Bus Operational Power Test (Paragraph 3.3.3.2.1)

Required Noisy Bus Voltage NBV (Volts)	Measured NBV (Volts)	Required Peak Current (Amps)	Maximum Peak Noisy Bus Current NBI (Amps)	Required Peak Power (Watts)	Calculated Peak Power (NBV x NBI) (Watts)	Pass/Fail
26.95 - 27.05		≤1		≤40		
28.95 - 29.05		≤1		≤40		
30.95 - 31.05		≤1		≤40		

Required Noisy Bus Voltage NBV (Volts)	Measured NBV (Volts)	Average Noisy Bus Current NBI (Amps)/sec	Required Average Power (Watts)	Calculated Average Power (NBV x NBI) (Watts)	Pass/Fail
26.95 - 27.05			≤8		
28.95 - 29.05			≤8		
30.95 - 31.05			≤8		

Required Noisy Bus Voltage NBV (Volts)	Measured NBV (Volts)	Bus Current During the I/H, D. Period	Pass/Fail
26.95 - 27.05		ma * ma **	Not Applicable
28.75 - 29.05		ma* ma**	Not Applicable
30.95 - 31.05		ma * ma **	Not Applicable

\* Between beams  
\*\* Between cal tests

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_    S/N: \_\_\_\_\_  
Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_

Customer Representative    Date

Test Systems Engineer    Date

Quality Control    Date

19 Aug 98

**TEST DATA SHEET NO. 6**  
**Noisy Power Bus Turn On Transient Test (Paragraph 3.3.3.2.2)**

**+31 Volts**

Parameter	Measured/Calculated	Required	Pass/Fail
Peak Current	Amps	<11.5 Amps	
Pulse Width	ms	<100 ms	
Rate of Change(slope): dI/dT	ma/μs	<744 mA/μs	

**+29 Volts**

Parameter	Measured/Calculated	Required	Pass/Fail
Peak Current	Amps	<11.5 Amps	
Pulse Width	ms	<100 ms	
Rate of Change(slope): dI/dT	ma/μs	<744 mA/μs	

**+27 Volts**

Parameter	Measured/Calculated	Required	Pass/Fail
Peak Current	Amps	<11.5 Amps	
Pulse Width	ms	<100 ms	
Rate of Change(slope): dI/dT	ma/μs	<744 mA/μs	

EOS/AMSU-A1 System P/N: \_\_\_\_\_ Shop Order: \_\_\_\_\_ S/N: \_\_\_\_\_

Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_\_\_\_\_\_  
Customer Representative      Date\_\_\_\_\_  
Test Systems Engineer      Date\_\_\_\_\_  
Quality Control      Date

**TEST DATA SHEET NO. 7**  
Passive Analog Interface Test (Paragraph 3.3.4)

Number	Thermistor	Required Temperature (Celsius)	Measured Temperature (Celsius)	Pass/Fail
1	A1-1 SCAN MOTOR	_____ * $\pm 5^{\circ}$		
2	A1-2 SCAN MOTOR	_____ * $\pm 5^{\circ}$		
3	A1-1 RF SHELF # 1	_____ * $\pm 5^{\circ}$		
4	A1-2 RF SHELF # 1	_____ * $\pm 5^{\circ}$		
5	A1-1 WARM LOAD	_____ * $\pm 5^{\circ}$		
6	A1-2 WARM LOAD	_____ * $\pm 5^{\circ}$		
7	A1-1 RF SHELF # 2	_____ * $\pm 5^{\circ}$		
8	A1-2 RF SHELF # 2	_____ * $\pm 5^{\circ}$		

\* is the measured temperature of the unit environment

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_    S/N: \_\_\_\_\_  
Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_    LPT \_\_\_\_\_

\_\_\_\_\_  
Customer Representative    Date

\_\_\_\_\_  
Test Systems Engineer    Date

\_\_\_\_\_  
Quality Control    Date

**TEST DATA SHEET NO. 8**  
Instrument Commanding Test (Paragraph 3.3.5.2)

Step	Instrument Status	(Y)es / (N)o
12	Full Scan Mode command received?	
13	Is A1-1 motor scanning?	
14	Did A1-1 motor stop scanning?	
15	Is A1-2 motor scanning?	
16	Did A1-2 motor stop scanning?	
17	Are both motors scanning?	
18	Reflectors positioned looking at warm loads?	
19	Reflectors positioned looking at nadir?	
20	Reflectors positioned looking at cold cal 1?	
21	Reflectors positioned looking at cold cal 4?	
22	Reflectors positioned looking at cold cal 3?	
23	Reflectors positioned looking at cold cal 2?	
24	Reflectors positioned looking at cold cal 1?	
25	Did PLO toggle?	
25	Did C&DH processor reset?	

Yes = Pass No = Fail

EOS/AMSU-A1 System P/N 1356008 Shop Order: \_\_\_\_\_ S/N: \_\_\_\_\_  
Circle Test: 1<sup>st</sup> CPT Final CPT Sub CPT \_\_\_\_\_ LPT \_\_\_\_\_

\_\_\_\_\_  
Customer Representative Date

\_\_\_\_\_  
Test Systems Engineer Date

\_\_\_\_\_  
Quality Control Date



**TEST DATA SHEET NO. 9** (Sheet 1 of 3)  
Science and Engineering Data Test (Full Scan Mode) (Paragraph 3.3.5.3.1)

Step	Instrument Status	(Y)es / (N)o
1	Full Scan Mode command received?	
2	ENGR OK message seen?	
3	Unit (both reflectors) running in full scan mode?	

Yes = Pass No = Fail

Step	Element	Description	Measured Value* (Binary)	Required Value (Binary)	(P)ass/(F)ail
4a	1-2	Packet ID		0000100100000101	
4b	3-4	Packet Length		0000001010111111	
4c	5-6	Unit Serial Number		0000001100000000	
4d	7-8	Instrument Mode/ Status		1001101000000010	

RADIOMETER SCENE DATA			
Step	Description	Required Counts	(P)ass/(F)ail
4f	Review All Scene Data	12500-20500	

PRT TEMPERATURE DATA				
Step	Element	Description	Required	(P)ass/(F)ail
4g	1090-1178	Review All PRT Data**	10-40 degrees C	
4g	1180	Temperature Sensor Reference	23244-26317 counts	

STATUS				
Step	Description	Status*	Required Status	(P)ass/(F)ail
4h	Antenna in Full Scan Mode		YES	
	Antenna in Warm Cal Mode		NO	
	Antenna in Cold Cal Mode		NO	
	Antenna in Nadir Mode		NO	
	Cold Cal Position LSB		ZERO	
	Cold Cal Position MSB		ZERO	
	PLO Redundancy		PLO #1	
	Scanner A1-1 Power		ON	
	Scanner A1-2 Power		ON	
	PLO #1 Lock		YES	
	PLO #2 Lock		OFF	
	ADC Latchup Flag		ONE	

\* Rewriting printout data on this data sheet is optional.

\*\* Refer to Table IV for PRT Data Description

EOS/AMSU-A1 System P/N 1356008 Shop Order: \_\_\_\_\_ S/N: \_\_\_\_\_  
Circle Test: 1<sup>st</sup> CPT Final CPT Sub CPT \_\_\_\_\_ LPT \_\_\_\_\_

Customer Representative \_\_\_\_\_ Date \_\_\_\_\_

Test Systems Engineer \_\_\_\_\_ Date \_\_\_\_\_

Quality Control \_\_\_\_\_ Date \_\_\_\_\_

**TEST DATA SHEET NO. 9** (Sheet 2 of 3)  
Science and Engineering Data Test (Full Scan Mode) (Paragraph 3.3.5.3.1)

REFLECTOR POSITIONS (Step 4e)								
BP	A1-1 REFLECTOR				A1-2 REFLECTOR			
	Element	Position (*)	Required (**) $\pm 5$	(P)ass/ (F)ail	Element	Position (*)	Required (**) $\pm 5$	(P)ass/ (F)ail
1	14				16			
2	48				50			
3	82				84			
4	116				118			
5	150				152			
6	184				186			
7	218				220			
8	252				254			
9	286				288			
10	320				322			
11	354				356			
12	388				390			
13	422				424			
14	456				458			
15	490				492			
16	524				526			
17	558				560			
18	592				594			
19	626				628			
20	660				662			
21	694				696			
22	728				730			
23	762				764			
24	796				798			
25	830				832			
26	864				866			
27	898				900			
28	932				934			
29	966				968			
30	1000				1002			
CC	1034				1036			
WC	1186				1188			
* Actual counts from printout. Rewriting counts on this data sheet is optional.								
** Required counts from AE26002/1 TDS 5&6 +/- 5 counts								

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_    S/N: \_\_\_\_\_  
Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_    LPT \_\_\_\_\_

\_\_\_\_\_  
Customer Representative                      Date

\_\_\_\_\_  
Test Systems Engineer                      Date

\_\_\_\_\_  
Quality Control                              Date

**TEST DATA SHEET NO. 9** (Sheet 3 of 3)  
 Science and Engineering Data Test (Full Scan Mode) (Paragraph 3.3.5.3.1)

ENGINEERING DATA				
Step	Description	Measured*	Required	(P)ass/(F)ail
4i	Signal Processor (+5 VDC)		+4 to +6 volts	
	Signal Processor (+15 VDC)		+14 to +16 volts	
	Signal Processor (-15 VDC)		-14 to -16 volts	
	Scan Drive (+5 VDC)		+4 to +6 volts	
	Scan Drive (+15 VDC)		+14 to +16 volts	
	Scan Drive (-15 VDC)		-14 to -16 volts	
	PLO (+15 VDC)		+14 to +16 volts	
	PLO (-15 VDC)		-14 to -16 volts	
	Receiver (+8 VDC)		+7 to +9 volts	
	Mixer/IF Amplifier A1-1 (+10 VDC)		+9 to +11 volts	
	Mixer/IF Amplifier A1-2 (+10 VDC)		+9 to +11 volts	
	LO Channel 6		+9 to +11 volts	
	LO Channel 7		+9 to +11 volts	
	LO Channel 3		+9 to +11 volts	
	LO Channel 4		+9 to +11 volts	
	LO Channel 5		+9 to +11 volts	
	LO Channel 8		+9 to +11 volts	
	LO Channel 15		+14 to +16 volts	
	Quiet Bus Current		≤ 3 Amps	
	A1-1 Noisy Bus Current		≤ 125 milliamps	
	A1-2 Noisy Bus Current		≤ 125 milliamps	

\* Rewriting printout data on this data sheet is optional.

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_    S/N: \_\_\_\_\_  
 Circle Test:   1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_    LPT \_\_\_\_\_

Customer Representative    Date

Test Systems Engineer    Date

Quality Control    Date

**TEST DATA SHEET NO. 10** (Sheet 1 of 2)  
Science and Engineering Data Test (Warm Cal Mode) (Paragraph 3.3.5.3.2)

Step	Instrument Status	(Y)es / (N)o
1	Warm Cal Mode command received?	
2	ENGR OK message seen?	
3	Both reflectors positioned at warm loads?	

Yes = Pass No = Fail

Step	Element	Description	Measured Value* (Binary)	Required Value (Binary)	(P)ass/(F)ail
4a	1-2	Packet ID		0000100100000011	
4b	3-4	Packet Length		0000001010111111	
4c	5-6	Unit Serial Number		0000001100000000	
4d	7-8	Instrument Mode/ Status		1001101000000100	

RADIOMETER SCENE DATA			
Step	Description	Required Counts	(P)ass/(F)ail
4f	Review All Scene Data	12500-20500	

PRT TEMPERATURE DATA				
Step	Element	Description	Required	(P)ass/(F)ail
4g	1090-1178	Review All PRT Data**	10-40 degrees C	
4g	1180	Temperature Sensor Reference	23244-26317 counts	

STATUS				
Step	Description	Status*	Required Status	(P)ass/(F)ail
4h	Antenna in Full Scan Mode		NO	
	Antenna in Warm Cal Mode		YES	
	Antenna in Cold Cal Mode		NO	
	Antenna in Nadir Mode		NO	
	Cold Cal Position LSB		ZERO	
	Cold Cal Position MSB		ZERO	
	PLO Redundancy		PLO #1	
	Scanner A1-1 Power		ON	
	Scanner A1-2 Power		ON	
	PLO #1 Lock		YES	
	PLO #2 Lock		OFF	
	ADC Latchup Flag		ONE	

\* Rewriting printout data on this data sheet is optional.

\*\* Refer to Table IV for PRT Data Description

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_ S/N: \_\_\_\_\_  
Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_ LPT \_\_\_\_\_

	Test Systems Engineer	Date	
Customer Representative	Date	Quality Control	Date

**TEST DATA SHEET NO. 10** (Sheet 2 of 2)  
Science and Engineering Data Test (Warm Cal Mode) (Paragraph 3.3.5.3.2)

REFLECTOR POSITIONS (Step 4e)						
BP	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
1-30						
* Actual range (min to max) of counts from printout (Only beam positions 1-30). Rewriting counts on this data sheet is optional. ** Required counts from AE26002/1 TDS 5&6 $\pm 5$ counts for warm calibration position						

ENGINEERING DATA				
Step	Description	Measured***	Required	(P)ass/(F)ail
4i	Signal Processor (+5 VDC)		+4 to +6 volts	
	Signal Processor (+15 VDC)		+14 to +16 volts	
	Signal Processor (-15 VDC)		-14 to -16 volts	
	Scan Drive (+5 VDC)		+4 to +6 volts	
	Scan Drive (+15 VDC)		+14 to +16 volts	
	Scan Drive (-15 VDC)		-14 to -16 volts	
	PLO (+15 VDC)		+14 to +16 volts	
	PLO (-15 VDC)		-14 to -16 volts	
	Receiver (+8 VDC)		+7 to +9 volts	
	Mixer/IF Amplifier A1-1 (+10 VDC)		+9 to +11 volts	
	Mixer/IF Amplifier A1-2 (+10 VDC)		+9 to +11 volts	
	LO Channel 6		+9 to +11 volts	
	LO Channel 7		+9 to +11 volts	
	LO Channel 3		+9 to +11 volts	
	LO Channel 4		+9 to +11 volts	
	LO Channel 5		+9 to +11 volts	
	LO Channel 8		+9 to +11 volts	
	LO Channel 15		+14 to +16 volts	
	Quiet Bus Current		$\leq 3$ Amps	
	A1-1 Noisy Bus Current		$\leq 125$ milliamps	
	A1-2 Noisy Bus Current		$\leq 125$ milliamps	

\*\*\* Rewriting printout data on this data sheet is optional.

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_ S/N: \_\_\_\_\_  
 Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_ LPT \_\_\_\_\_

\_\_\_\_\_  
Customer Representative                      Date

\_\_\_\_\_  
Test Systems Engineer                      Date

\_\_\_\_\_  
Quality Control                      Date

**TEST DATA SHEET NO. 11** (Sheet 1 of 5)  
Science and Engineering Data Test (Cold Cal Mode) (Paragraph 3.3.5.3.3)

Step	Instrument Status	(Y)es / (N)o
1	Cold Cal Mode command received?	
2	ENGR OK message seen?	
3	Both reflectors positioned at cold cal position 1?	
6	Cold Cal Position 2 command received?	
7	ENGR OK message seen?	
8	Both reflectors positioned at cold cal position 2?	
11	Cold Cal Position 3 command received?	
12	ENGR OK message seen?	
13	Both reflectors positioned at cold cal position 3?	
16	Cold Cal Position 4 command received?	
17	ENGR OK message seen?	
18	Both reflectors positioned at cold cal position 4?	

Yes = Pass No = Fail

Step	Element	Description	Measured Value* (Binary)	Required Value (Binary)	(P)ass/(F)ail
4a	1-2	Packet ID		0000100100000011	
4b	3-4	Packet Length		0000001010111111	
4c	5-6	Unit Serial Number		0000001100000000	
4d	7-8	Instrument Mode/ Status		1001101000001000	
9a	7-8	Instrument Mode/ Status		1001101000101000	
14a	7-8	Instrument Mode/ Status		1001101001001000	
19a	7-8	Instrument Mode/ Status		1001101001101000	

RADIOMETER SCENE DATA			
Step	Description	Required Counts	(P)ass/(F)ail
4f	Review All Scene Data	12500-20500	

PRT TEMPERATURE DATA				
Step	Element	Description	Required	(P)ass/(F)ail
4g	1090-1178	Review All PRT Data**	10-40 degrees C	
4g	1180	Temperature Sensor Reference	23244-26317 counts	

\* Rewriting printout data on this data sheet is optional.

\*\* Refer to Table IV for PRT Data Description

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_ S/N: \_\_\_\_\_  
Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_ LPT \_\_\_\_\_

		Test Systems Engineer	Date
Customer Representative	Date	Quality Control	Date

**TEST DATA SHEET NO. 11** (Sheet 2 of 5)  
Science and Engineering Data Test (Cold Cal Mode) (Paragraph 3.3.5.3.3)

STATUS				
Step	Description	Status*	Required Status	(P)ass/(F)ail
4h	Antenna in Full Scan Mode		NO	
	Antenna in Warm Cal Mode		NO	
	Antenna in Cold Cal Mode		YES	
	Antenna in Nadir Mode		NO	
	Cold Cal Position LSB		ZERO	
	Cold Cal Position MSB		ZERO	
	PLO Redundancy		PLO #1	
	Scanner A1-1 Power		ON	
	Scanner A1-2 Power		ON	
	PLO #1 Lock		YES	
	PLO #2 Lock		OFF	
	ADC Latchup Flag		ONE	
9b	Cold Cal Position LSB		ONE	
	Cold Cal Position MSB		ZERO	
14b	Cold Cal Position LSB		ZERO	
	Cold Cal Position MSB		ONE	
19b	Cold Cal Position LSB		ONE	
	Cold Cal Position MSB		ONE	

\* Rewriting printout data on this data sheet is optional.

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_    S/N: \_\_\_\_\_  
 Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_    LPT \_\_\_\_\_

\_\_\_\_\_  
Customer Representative                      Date

\_\_\_\_\_  
Test Systems Engineer                      Date

\_\_\_\_\_  
Quality Control                              Date

**TEST DATA SHEET NO. 11** (Sheet 3 of 5)  
Science and Engineering Data Test (Cold Cal Mode) (Paragraph 3.3.5.3.3)

REFLECTOR POSITIONS (Step 6e)						
BP	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) ± 5 counts	(P)ass/ (F)ail	Position Range (*)	Required (**) ± 5 counts	(P)ass/ (F)ail
1-30						
** Required counts from AE26002/1 TDS 5&6 +/- 5 counts for Cold Cal Position #1						

REFLECTOR POSITIONS (Step 14c)						
BP	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) ± 5 counts	(P)ass/ (F)ail	Position Range (*)	Required (**) ± 5 counts	(P)ass/ (F)ail
1-30						
** Required counts from AE26002/1 TDS 5&6 +/- 5 counts for Cold Cal Position #2						

REFLECTOR POSITIONS (Step 22c)						
BP	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) ± 5 counts	(P)ass/ (F)ail	Position Range (*)	Required (**) ± 5 counts	(P)ass/ (F)ail
1-30						
** Required counts from AE26002/1 TDS 5&6 +/- 5 counts for Cold Cal Position #3						

REFLECTOR POSITIONS (Step 30c)						
BP	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) ± 5 counts	(P)ass/ (F)ail	Position Range (*)	Required (**) ± 5 counts	(P)ass/ (F)ail
1-30						
** Required counts from AE26002/1 TDS 5&6 +/- 5 counts for Cold Cal Position #4						

\* Actual range (min to max) of counts from printout (Only beam positions 1-30).  
Rewriting counts on this data sheet is optional.

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_ S/N: \_\_\_\_\_  
Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_ LPT \_\_\_\_\_

Customer Representative \_\_\_\_\_ Date \_\_\_\_\_

Test Systems Engineer \_\_\_\_\_ Date \_\_\_\_\_

Quality Control \_\_\_\_\_ Date \_\_\_\_\_



**TEST DATA SHEET NO. 11** (Sheet 4 of 5)  
Science and Engineering Data Test (Cold Cal Mode) (Paragraph 3.3.5.3.3)

REFLECTOR POSITIONS (Step 6e)						
Beam Position	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Actual Position (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
Cold Cal 1						
* Actual count from printout Cold Cal 1 beam position ** Required counts from AE26002/1 TDS $6 \pm 5$ counts for Cold Cal 1						

REFLECTOR POSITIONS (Step 14c)						
Beam Position	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Actual Position (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
Cold Cal 2						
* Actual count from printout Cold Cal 2 beam position ** Required counts from AE26002/1 TDS $6 \pm 5$ counts for Cold Cal 2						

REFLECTOR POSITIONS (Step 22c)						
Beam Position	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Actual Position (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
Cold Cal 3						
* Actual count from printout Cold Cal 3 beam position ** Required counts from AE26002/1 TDS $6 \pm 5$ counts for Cold Cal 3						

REFLECTOR POSITIONS (Step 30c)						
Beam Position	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail	Actual Position (*)	Required (**) $\pm 5$ counts	(P)ass/ (F)ail
Cold Cal 4						
* Actual count from printout Cold Cal 4 beam position ** Required counts from AE26002/1 TDS $6 \pm 5$ counts for Cold Cal 4						

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_ S/N: \_\_\_\_\_  
 Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_ LPT \_\_\_\_\_

Customer Representative \_\_\_\_\_ Date \_\_\_\_\_

Test Systems Engineer \_\_\_\_\_ Date \_\_\_\_\_

Quality Control \_\_\_\_\_ Date \_\_\_\_\_

**TEST DATA SHEET NO. 11 (Sheet 5 of 5)**  
Science and Engineering Data Test (Cold Cal Mode) (Paragraph 3.3.5.3.3)

ENGINEERING DATA				
Step	Description	Measured*	Required	(P)ass/(F)ail
4i	Signal Processor (+5 VDC)		+4 to +6 volts	
	Signal Processor (+15 VDC)		+14 to +16 volts	
	Signal Processor (-15 VDC)		-14 to -16 volts	
	Scan Drive (+5 VDC)		+4 to +6 volts	
	Scan Drive (+15 VDC)		+14 to +16 volts	
	Scan Drive (-15 VDC)		-14 to -16 volts	
	PLO (+15 VDC)		+14 to +16 volts	
	PLO (-15 VDC)		-14 to -16 volts	
	Receiver (+8 VDC)		+7 to +9 volts	
	Mixer/IF Amplifier A1-1 (+10 VDC)		+9 to +11 volts	
	Mixer/IF Amplifier A1-2 (+10 VDC)		+9 to +11 volts	
	LO Channel 6		+9 to +11 volts	
	LO Channel 7		+9 to +11 volts	
	LO Channel 3		+9 to +11 volts	
	LO Channel 4		+9 to +11 volts	
	LO Channel 5		+9 to +11 volts	
	LO Channel 8		+9 to +11 volts	
	LO Channel 15		+14 to +16 volts	
	Quiet Bus Current		≤ 3 Amps	
	A1-1 Noisy Bus Current		≤ 125 milliamps	
	A1-2 Noisy Bus Current		≤ 125 milliamps	

\* Rewriting printout data on this data sheet is optional.

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_    S/N: \_\_\_\_\_  
Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_    LPT \_\_\_\_\_

Customer Representative    Date

Test Systems Engineer    Date

Quality Control    Date

**TEST DATA SHEET NO. 12** (Sheet 1 of 2)  
Science and Engineering Data Test (Nadir Mode) (Paragraph 3.3.5.3.4)

Step	Instrument Status	(Y)es / (N)o
1	Nadir Mode command received?	
2	ENGR OK message seen?	
3	Both reflectors positioned at nadir position?	

Yes = Pass No = Fail

Step	Element	Description	Measured Value* (Binary)	Required Value (Binary)	(P)ass/(F)ail
4a	1-2	Packet ID		0000100100000011	
4b	3-4	Packet Length		0000001010111111	
4c	5-6	Unit Serial Number		0000001100000000	
4d	7-8	Instrument Mode/ Status		1001101000010000	

RADIOMETER SCENE DATA			
Step	Description	Required Counts	(P)ass/(F)ail
4f	Review All Scene Data	12500-20500	

PRT TEMPERATURE DATA				
Step	Element	Description	Required	(P)ass/(F)ail
4g	1090-1178	Review All PRT Data**	10-40 degrees C	
4g	1180	Temperature Sensor Reference	23244-26317 counts	

STATUS				
Step	Description	Status*	Required Status	(P)ass/(F)ail
4h	Antenna in Full Scan Mode		NO	
	Antenna in Warm Cal Mode		NO	
	Antenna in Cold Cal Mode		NO	
	Antenna in Nadir Mode		YES	
	Cold Cal Position LSB		ZERO	
	Cold Cal Position MSB		ZERO	
	PLO Redundancy		PLO #1	
	Scanner A1-1 Power		ON	
	Scanner A1-2 Power		ON	
	PLO #1 Lock		YES	
	PLO #2 Lock		OFF	
	ADC Latchup Flag		ONE	

\* Rewriting printout data on this data sheet is optional.

\*\* Refer to Table IV for PRT Data Description

EOS/AMSU-A1 System P/N 1356008 Shop Order: \_\_\_\_\_ S/N: \_\_\_\_\_  
Circle Test: 1<sup>st</sup> CPT Final CPT Sub CPT \_\_\_\_\_ LPT \_\_\_\_\_

Customer Representative \_\_\_\_\_ Date \_\_\_\_\_

Test Systems Engineer \_\_\_\_\_ Date \_\_\_\_\_

Quality Control \_\_\_\_\_ Date \_\_\_\_\_

**TEST DATA SHEET NO. 12** (Sheet 2 of 2)  
Science and Engineering Data Test (Nadir Mode) (Paragraph 3.3.5.3.4)

REFLECTOR POSITIONS (Step 4e)						
BP	A1-1 REFLECTOR			A1-2 REFLECTOR		
	Position Range (*)	Required (**) ± 5 counts	(P)ass/ (F)ail	Position Range (*)	Required (**) ± 5 counts	(P)ass/ (F)ail
1-30						
* Actual range (min to max) of counts from printout (Only beam positions 1-30). Rewriting counts on this data sheet is optional. ** Required counts from AE26002/1 TDS 5&6 +/- 5 counts for "true" nadir position.						

ENGINEERING DATA				
Step	Description	Measured***	Required	(P)ass/(F)ail
4i	Signal Processor (+5 VDC)		+4 to +6 volts	
	Signal Processor (+15 VDC)		+14 to +16 volts	
	Signal Processor (-15 VDC)		-14 to -16 volts	
	Scan Drive (+5 VDC)		+4 to +6 volts	
	Scan Drive (+15 VDC)		+14 to +16 volts	
	Scan Drive (-15 VDC)		-14 to -16 volts	
	PLO (+15 VDC)		+14 to +16 volts	
	PLO (-15 VDC)		-14 to -16 volts	
	Receiver (+8 VDC)		+7 to +9 volts	
	Mixer/IF Amplifier A1-1 (+10 VDC)		+9 to +11 volts	
	Mixer/IF Amplifier A1-2 (+10 VDC)		+9 to +11 volts	
	LO Channel 6		+9 to +11 volts	
	LO Channel 7		+9 to +11 volts	
	LO Channel 3		+9 to +11 volts	
	LO Channel 4		+9 to +11 volts	
	LO Channel 5		+9 to +11 volts	
	LO Channel 8		+9 to +11 volts	
	LO Channel 15		+14 to +16 volts	
	Quiet Bus Current		≤ 3 Amps	
	A1-1 Noisy Bus Current		≤ 125 milliamps	
	A1-2 Noisy Bus Current		≤ 125 milliamps	

\*\*\* Rewriting printout data on this data sheet is optional.

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_    S/N: \_\_\_\_\_  
 Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_    LPT \_\_\_\_\_

		Test Systems Engineer	Date
		Quality Control	Date

**TEST DATA SHEET NO. 13**  
Noisy Bus Current Measurement During Warm Cal, Cold Cal and Nadir (Paragraph 3.3.5.3.5)

Instrument Mode	Noisy Bus Current (mA)	Pass/Fail
Warm Cal A1-1 & A1-2 Scanner ON		Not Applicable
A1-1 Scanner / A1-2 Scanner OFF / ON		
A1-2 Scanner / A1-1 Scanner OFF / ON		
A1-1 Scanner / A1-2 Scanner OFF / OFF		
Cold Cal A1-1 & A1-2 Scanner ON		
Nadir A1-1 & A1-2 Scanner ON		Not Applicable

EOS/AMSU-A1 System P/N 1356008  
Circle Test: 1<sup>st</sup> CPT      Final CPT

Shop Order: \_\_\_\_\_ S/N: \_\_\_\_\_  
Sub CPT \_\_\_\_\_ LPT \_\_\_\_\_

\_\_\_\_\_  
Customer Representative      Date

\_\_\_\_\_  
Test Systems Engineer      Date

\_\_\_\_\_  
Quality Control      Date

TEST DATA SHEET NO. 14  
1553 Bus Interface Test (Paragraph 3.3.5.4)

ATTACH BUS A WAVE FORM

P/F

Bus A Amplitude \_\_\_\_\_ : 18.0 – 27.0 VP-P \_\_\_\_\_  
Bus A Rise Time \_\_\_\_\_ : 100 – 300 nsec \_\_\_\_\_

ATTACH BUS B WAVE FORM

P/F

Bus B Amplitude \_\_\_\_\_ : 18.0 – 27.0 VP-P \_\_\_\_\_  
Bus B Rise Time \_\_\_\_\_ : 100 – 300 nsec \_\_\_\_\_

1<sup>st</sup> CPT: \_\_\_\_\_; Final CPT \_\_\_\_\_  
S/O: \_\_\_\_\_  
P/N: \_\_\_\_\_  
SN: \_\_\_\_\_

\_\_\_\_\_  
Test Engineer Date  
\_\_\_\_\_  
Quality Control Date

**TEST DATA SHEET NO. 15**  
Test Point Interface Test (8 Second Sync Pulse TP) (Paragraph 3.3.6.2 )

**8 SECOND SYNC PULSE TEST POINT**

Attach Photograph or Plot Here or to Back of TDS

8 SECOND SYNC PULSE TEST POINT				
Step	Parameter	Measured	Required	(P)ass / (F)ail
2	Pulse Length	seconds	8 seconds +/- 10%	

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_    S/N: \_\_\_\_\_  
Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_

\_\_\_\_\_  
Test Systems Engineer                      Date  
\_\_\_\_\_  
Quality Control                              Date

**TEST DATA SHEET NO. 16**  
Test Point Interface Test (Integrate/Hold and Dump TPs) (Paragraph 3.3.6.3)

**INTEGRATE/HOLD AND DUMP TEST POINTS**

Attach Photograph or Plot Here or to Back of TDS

**INTEGRATE/HOLD SIGNAL TEST POINT**

Step	Parameter	Measured	Required	(P)ass / (F)ail
4	Time Measured (A)*	milliseconds	165 ± 5 ms	
4	Time Measured (B)*	milliseconds	32 -38 ms	
4	Time Measurement (A+B)*	milliseconds	200 ± 5 ms	

**DUMP SIGNAL TEST POINT**

Step	Parameter	Measured	Required	(P)ass / (F)ail
4	Time Measured (D)*	ms	9-15 ms	

\* Refer to Figure 18 for Waveform Definition

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_    S/N: \_\_\_\_\_  
Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_

Test Systems Engineer \_\_\_\_\_ Date \_\_\_\_\_

Quality Control \_\_\_\_\_ Date \_\_\_\_\_



**TEST DATA SHEET NO. 17**  
Test Point Interface Test (Radiometer Channel Analog Output TPs) (Paragraph 3.3.6.4 )

**RADIOMETER CHANNEL ANALOG OUTPUT TEST POINTS**

Attach Photographs or Plots Here or to Back of TDS

**RADIOMETER CHANNEL ANALOG OUTPUT TEST POINTS**

Channel	Integration Time Measured (E)*	Integration Time Required (ms)	Hold Time Measured (F)*	Hold Time Required (ms)	(P)ass / (F)ail
3	ms	165 ± 5 ms	ms	23-27	
4	ms	165 ± 5 ms	ms	23-27	
5	ms	165 ± 5 ms	ms	23-27	
6	ms	165 ± 5 ms	ms	23-27	
7	ms	165 ± 5 ms	ms	23-27	
8	ms	165 ± 5 ms	ms	23-27	
9	ms	165 ± 5 ms	ms	23-27	
10	ms	165 ± 5 ms	ms	23-27	
11	ms	165 ± 5 ms	ms	23-27	
12	ms	165 ± 5 ms	ms	23-27	
13	ms	165 ± 5 ms	ms	23-27	
14	ms	165 ± 5 ms	ms	23-27	
15	ms	165 ± 5 ms	ms	23-27	

\* Refer to Figure 18 for Waveform Definition

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_    S/N: \_\_\_\_\_  
Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_

Test Systems Engineer \_\_\_\_\_ Date \_\_\_\_\_

Quality Control \_\_\_\_\_ Date \_\_\_\_\_

**TEST DATA SHEET NO. 18**  
Test Point Interface Test (PLO #1 and PLO #2 Lock TPs) (Paragraph 3.3.6.5 )

PLO LOCK DETECT TEST POINTS				
Step	Parameter	Measured	Required	(P)ass / (F)ail
3	PLO #1 Lock Detect*	volts	$\pm 1.0$ volt	
6	PLO #2 Lock Detect**	volts	$\pm 1.0$ volt	

\* When PLO #1 is selected

\*\* When PLO #2 is selected

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_    S/N: \_\_\_\_\_  
Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_

\_\_\_\_\_  
Test Systems Engineer                      Date

\_\_\_\_\_  
Quality Control                              Date

**TEST DATA SHEET NO. 19**  
Test Point Interface Test (GSE Modes) (Paragraphs 3.3.6.6 - 3.3.6.11)

	GSE MODES					
	1	2	3	4	5	7
	MODE OBSERVED? (YES/NO)					
DATA REVIEWED? (YES/NO)						
Printout data						
Packet ID						
Packet Length						
Unit Serial Number						
Instrument Mode/Status						
Reflector Positions						
Radiometer Scene Data						
PRT Temperature Data						
Engineering Data						

EOS/AMSU-A1 System P/N 1356008  
Circle Test: 1<sup>st</sup> CPT      Final CPT

Shop Order: \_\_\_\_\_ S/N: \_\_\_\_\_

\_\_\_\_\_  
Test Systems Engineer      Date

\_\_\_\_\_  
Quality Control      Date

**TEST DATA SHEET NO. 20**  
Radiometer Functional Performance Test (PLO Frequency Measurements) (Paragraph 3.3.7.1)

PLO FREQUENCY MEASUREMENTS			
PLO	Measured Frequency (GHz)	Required Frequency (GHz)	Pass/Fail
# 1		57.290294 - 57.290394	
# 2		57.290294 - 57.290394	

P = Pass F = Fail

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_    S/N: \_\_\_\_\_  
Circle Test: 1<sup>st</sup> CPT    Final CPT

\_\_\_\_\_  
Customer Representative                      Date

\_\_\_\_\_  
Test Systems Engineer                      Date

\_\_\_\_\_  
Quality Control                      Date

**TEST DATA SHEET NO. 21** (Sheet 1 of 2)  
Radiometer Functional Performance Test (Relative NE $\Delta$ T Measurements\*) (Paragraph 3.3.7.2)  
PLO #1 Turned On

RELATIVE NE $\Delta$ T MEASUREMENTS (PLO #1 ACTIVE)			
Channel Number	Average NE $\Delta$ T for 5 Data Sets (K)	Required** NE $\Delta$ T (K)	Pass/Fail
3		0.40	
4		0.25	
5		0.25	
6		0.25	
7		0.25	
8		0.25	
9		0.25	
10		0.40	
11		0.40	
12		0.60	
13		0.80	
14		1.20	
15		0.50	

P = Pass F = Fail

\* Baseline data for acceptance tests. Use 1<sup>st</sup> CPT data along with specification value for pass/fail criteria.

\*\* For reference only

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_ S/N: \_\_\_\_\_  
Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_ LPT \_\_\_\_\_

\_\_\_\_\_  
Customer Representative                      Date

\_\_\_\_\_  
Test Systems Engineer                      Date

\_\_\_\_\_  
Quality Control                                      Date

**TEST DATA SHEET NO. 21** (Sheet 2 of 2)  
Radiometer Functional Performance Test (Relative NE $\Delta$ T Measurements\*) (Paragraph 3.3.7.2)  
PLO #2 Turned On

RELATIVE NE $\Delta$ T MEASUREMENTS (PLO #2 ACTIVE)			
Channel Number	Average NE $\Delta$ T for 5 Data Sets (K)	Required** NE $\Delta$ T (K)	Pass/Fail
9		0.25	
10		0.40	
11		0.40	
12		0.60	
13		0.80	
14		1.20	

P = Pass F = Fail

\* Baseline data for acceptance tests. Use 1<sup>st</sup> CPT data along with specification value for pass/fail criteria.

\*\* For reference only

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_    S/N: \_\_\_\_\_  
Circle Test: 1<sup>st</sup> CPT    Final CPT    Sub CPT \_\_\_\_\_    LPT \_\_\_\_\_

\_\_\_\_\_  
Customer Representative                      Date

\_\_\_\_\_  
Test Systems Engineer                      Date

\_\_\_\_\_  
Quality Control                              Date

**TEST DATA SHEET NO. 22**  
Channel Identification Test (Paragraph 3.3.8)

Channel Number	Antenna Location	Sweeper Freq. Setting (GHz)	Polarization (H/V)	Radiometric Data $\Delta$ Counts	Channel Verified (Yes/No)
3	A1-2	50.35	V		
4	A1-2	52.85	V		
5	A1-2	53.70	H		
6	A1-1	54.45	H		
7	A1-1	54.99	V		
8	A1-2	55.55	H		
9	A1-1	57.34	H		
10	A1-1	57.50	H		
11	A1-1	57.564	H		
12	A1-1	57.59	H		
13	A1-1	57.602	H		
14	A1-1	57.608	H		
15	A1-1	89.55	V		

EOS/AMSU-A1 System P/N 1356008    Shop Order: \_\_\_\_\_    S/N: \_\_\_\_\_  
 Circle Test:   CPT    Final CPT    Sub CPT \_\_\_\_\_    LPT \_\_\_\_\_

\_\_\_\_\_  
Customer Representative                      Date

\_\_\_\_\_  
Test Systems Engineer                      Date

\_\_\_\_\_  
Quality Control                              Date

This page intentionally left blank.






## DOCUMENT APPROVAL SHEET

TITLE Process Specification EOS/AMSU-A1, System Comprehensive and Limited Performance Tests Test Procedure		DOCUMENT NO. AE-26156/9A 19 August 1998	
INPUT FROM: A. Nieto	DATE	CDRL: 409	SPECIFICATION ENGINEER: DATE
CHECKED BY:	DATE	JOB NUMBER:	DATE
APPROVED SIGNATURES		DEPT. NO.	DATE
Specifications Engineering (J. Kirk) <u>J. Kirk</u>		8631	19 AUG 98
Safety (W. Neighbors) <u>W. Neighbors</u>		8331	8/20/98
Product Team Leader (A. Nieto) <u>A. Nieto</u>		8341	20 AUG 98
Systems Engineer (R. Platt) <u>R. Platt</u>		8311	8/20/98
Design Assurance (E. Lorenz) <u>E. Lorenz</u>		8331	8/20/98
Quality Assurance (R. Taylor) <u>R. Taylor</u> <i>FOR PMT</i>		7831	
Technical Director/PMO (R. Hauerwaas) <u>R. Hauerwaas</u>		4001	8/20/98
Configuration Management (J. Cavanaugh) <u>J. Cavanaugh</u>		8361	8/20/98
This Revision incorporated ECNs CAMSU-1876 and CAMSU-1887			
By my signature, I certify the above document has been reviewed by me and concurs with the technical requirements related to my area of responsibility.			
RELEASE (Data Center) FINAL			
<u>Carla Lunda 8-25-98</u>			



 <b>NASA</b> National Aeronautics and Space Administration				Report Documentation Page			
1. Report No. ---		2. Government Accession No. ---		3. Recipient's Catalog No. ---			
4. Title and Subtitle  Integrated Advanced Microwave Sounding Unit-A (AMSU-A), Performance Verification Report				5. Report Date November 1998			
				6. Performing Organization Code ---			
7. Author(s)  R. Haigh				8. Performing Organization Report No. 11337			
9. Performing Organization Name and Address Aerojet 1100 W. Hollyvale Azusa, CA 91702				10. Work Unit No. ---			
				11. Contract or Grant No. NAS 5-32314			
12. Sponsoring Agency Name and Address NASA Goddard Space Flight Center Greenbelt, Maryland 20771				13. Type of Report and Period Covered Final			
				14. Sponsoring Agency Code ---			
15. Supplementary Notes  ---							
16. ABSTRACT (Maximum 200 words )  This is the Performance Verification Report, Final Comprehensive Performance Test Report, P/N 1356008-1-TST S/N 202/A1, for the Integrated Advanced Microwave Sounding Unit-A (AMSU-A).							
17. Key Words (Suggested by Author(s))  EOS Microwave System			18. Distribution Statement  Unclassified --- Unlimited				
19. Security Classif. (of this report)  Unclassified		20. Security Classif. (of this page)  Unclassified		21. No. of pages  ---			
				22. Price  ---			

NASA FORM 1626 OCT 86



PREPARATION OF THE REPORT DOCUMENTATION PAGE

The last page of a report facing the third cover is the Report Documentation Page, RDP. Information presented on this page is used in announcing and cataloging reports as well as preparing the cover and title page. Thus, it is important that the information be correct. Instructions for filling in each block of the form are as follows:

Block 1. Report No. NASA report series number, if preassigned.

Block 2. Government Accession No. Leave blank.

Block 3. Recipient's Catalog No. Reserved for use by each report recipient.

Block 4. Title and Subtitle. Typed in caps and lower case with dash or period separating subtitle from title.

Block 5. Report Date. Approximate month and year the report will be published.

Block 6. Performing Organization Code. Leave blank.

Block 7. Authors. Provide full names exactly as they are to appear on the title page. If applicable, the word editor should follow a name.

Block 8. Performing Organization Report No. NASA installation report control number and, if desired, the non-NASA performing organization report control number.

Block 9. Performing Organization Name and Address. Provide affiliation (NASA program office, NASA installation, or contractor name) of authors.

Block 10. Work Unit No. Provide Research and Technology Objectives and Plants (RTOP) number.

Block 11. Contract or Grant No. Provide when applicable.

Block 12. Sponsoring Agency Name and Address. National Aeronautics and Space Administration, Washington, D.C. 20546-0001. If contractor report, add NASA installation or HQ program office.

Block 13. Type of Report and Period Covered. NASA formal report series; for Contractor Report also list type (interim, final) and period covered when applicable.

Block 14. Sponsoring Agency Code. Leave blank.

Block 15. Supplementary Notes. Information not included

elsewhere: affiliation of authors if additional space is required for Block 9, notice of work sponsored by another agency, monitor of contract, information about supplements (file, data tapes, etc.) meeting site and date for presented papers, journal to which an article has been submitted, note of a report made from a thesis, appendix by author other than shown in Block 7.

Block 16. Abstract. The abstract should be informative rather than descriptive and should state the objectives of the investigation, the methods employed (e.g., simulation, experiment, or remote sensing), the results obtained, and the conclusions reached.

Block 17. Key Words. Identifying words or phrases to be used in cataloging the report.

Block 18. Distribution Statement. Indicate whether report is available to public or not. If not to be controlled, use "Unclassified-Unlimited." If controlled availability is required, list the category approved on the Document Availability Authorization Form (see NHB 2200.2, Form FF427). Also specify subject category (see "Table of Contents" in a current issue of STAR) in which report is to be distributed.

Block 19. Security Classification (of the report). Self-explanatory.

Block 20. Security Classification (of this page). Self-explanatory.

Block 21. No. of Pages. Count front matter pages beginning with iii, text pages including internal blank pages, and the RDP, but not the title page or the back of the title page.

Block 22. Price Code. If Block 18 shows "Unclassified-Unlimited," provide the NTIS price code (see "NTIS Price Schedules" in a current issue of STAR) and at the bottom of the form add either "For sale by the National Technical Information Service, Springfield, VA 22161-2171" or "For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402-0001," whichever is appropriate.



<b>REPORT DOCUMENTATION PAGE</b>			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE		3. REPORT TYPE AND DATES COVERED
4. TITLE AND SUBTITLE  Integrated Advanced Microwave Sounding Unit-A (AMSU-A), Performance Verification Report			5. FUNDING NUMBERS  NAS 5-32314	
6. AUTHOR(S)  R. Haigh				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Aerojet 1100 W. Hollyvale Azusa, CA 91702			8. PERFORMING ORGANIZATION REPORT NUMBER  11337 November 1998	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) NASA Goddard Space Flight Center Greenbelt, Maryland 20771			10. SPONSORING/MONITORING AGENCY REPORT NUMBER  ---	
11. SUPPLEMENTARY NOTES  ---				
12a. DISTRIBUTION/AVAILABILITY STATEMENT  ---			12b. DISTRIBUTION CODE  ---	
13. ABSTRACT (Maximum 200 words)  This is the Performance Verification Report, Final Comprehensive Performance Test Report, P/N 1356008-1-TST, S/N 202/A1, for the Integrated Advanced Microwave Sounding Unit-A (AMSU-A).				
14. SUBJECT TERMS  EOS Microwave System			15. NUMBER OF PAGES	
			16. PRICE CODE  ---	
17. SECURITY CLASSIFICATION OF REPORT  Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE  Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT  Unclassified	20. LIMITATION OF ABSTRACT  SAR	





<b>REPORT DOCUMENTATION PAGE</b>			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE		3. REPORT TYPE AND DATES COVERED
4. TITLE AND SUBTITLE  Integrated Advanced Microwave Sounding Unit-A (AMSU-A), Performance Verification Report			5. FUNDING NUMBERS  NAS 5-32314	
6. AUTHOR(S)  R. Haigh				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Aerojet 1100 W. Hollyvale Azusa, CA 91702			8. PERFORMING ORGANIZATION REPORT NUMBER  11337 November 1998	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) NASA Goddard Space Flight Center Greenbelt, Maryland 20771			10. SPONSORING/MONITORING AGENCY REPORT NUMBER  ---	
11. SUPPLEMENTARY NOTES  ---				
12a. DISTRIBUTION/AVAILABILITY STATEMENT  ---			12b. DISTRIBUTION CODE  ---	
13. ABSTRACT (Maximum 200 words)  This is the Performance Verification Report, Final Comprehensive Performance Test Report, P/N 1356008-1-TST, S/N 202/A1 for the Integrated Advanced Microwave Sounding Unit-A (AMSU-A).				
14. SUBJECT TERMS  EOS Microwave System			15. NUMBER OF PAGES	
			16. PRICE CODE  ---	
17. SECURITY CLASSIFICATION OF REPORT  Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE  Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT  Unclassified	20. LIMITATION OF ABSTRACT  SAR	



## GENERAL INSTRUCTIONS FOR COMPLETING SF 298

The Report Documentation Page (RDP) is used in announcing and cataloging reports. It is important that this information be consistent with the rest of the report, particularly the cover and title page. Instructions for filing in each block of the form follow. It is important to stay within the lines to meet optical scanning requirements.

Block 1. Agency Use Only/Leave blank

Block 2. Report Date Full publication date including day, month, and year, if available (e.g., 1 Jan 88). Must cite at least the year.

Block 3. Type of Report and Dates Covered State whether report is interim, final, etc. If applicable, enter inclusive report dates (e.g., 10 Jun 87 - 30 Jun 88).

Block 4. Title and Subtitle A title is taken from the part of the report that provides the most meaningful and complete information. When a report is prepared in more than one volume report the primary title, add volume number and include subtitle for the specific volume. On classified documents enter the title classification in parentheses.

Block 5. Funding Numbers To include contract and grant numbers; may include program element number(s), project number(s), task number(s), and work unit number(s). Use the following labels:

C	-	Contract	PR	-	Project
G	-	Grant	TA	-	Task
PE	-	Program	WU	-	Work Unit
		Element			Accession No.

Block 6. Author(s) Name(s) of person(s) responsible for writing the report, performing the research, or credited with the content of the report. If editor or compiler, this should follow the name(s).

Block 7. Performing Organization Name(s) and Address(es) Self-explanatory.

Block 8. Performing Organization Report Number Enter the unique alphanumeric report number(s) assigned by the organization performing the report.

Block 9. Sponsoring/Monitoring Agency Name(s) and Address(es) Self-explanatory.

Block 10. Sponsoring/Monitoring Agency Reports Number (if known).

Block 11. Supplementary Notes Enter information not included elsewhere such as: Prepared in cooperation with ...; Trans. of ...; To be published in ... When a report is revised, include a statement whether the new report supersedes or supplements the older report.

Block 12.a Distribution/Availability Statement Denotes public availability or limitations. Cite any availability to the public. Enter additional limitations or special markings in all capitals (e.g., NOFORN, REL, ITAR).

DOD - See DoDD 5230.24 *Distribution Statement on Technical Documents*

DOE - See authorities.

NASA - See Handbook NHB 2200.2.

NTIS - Leave blank.

Block 12.b Distribution Code

DOD - Leave blank.

DOE - Enter DOE distribution categories from the standard Distribution for Unclassified Scientific and Technical Reports.

NASA - Leave blank.

NTIS - Leave blank.

Block 13. Abstract Include a brief *Maximum 200 words* factual summary of the most significant information contained in the report.

Block 14. Subject Terms Keywords or phrases identifying major subjects in the report.

Block 15. Number of Pages Enter the total number of pages.

Block 16. Price Code Enter appropriate price code (NTIS only).

Block 17 - 19. Security Classifications Self-explanatory. Enter U.S. Security Classification in accordance with U.S. Security Regulations (i.e., UNCLASSIFIED). If form contains classified information, stamp classification on the top and bottom of the page.

Block 20. Limitation of Abstract This block must be completed to assign a limitation to the abstract. Enter either UL (unlimited) or SAR (same as report). An entry in this block is necessary if the abstract is to be limited. If blank, the abstract is assumed to be unlimited.





## DOCUMENT APPROVAL SHEET

TITLE Performance Verification Report Final Comprehensive Performance Test Report P/N 1356008-1-TST, S/N 202/A1			DOCUMENT NO. Report 11337 November 1998	
INPUT FROM: R. Haigh	DATE	CDRL: 208	SPECIFICATION ENGINEER: N/A	DATE
CHECKED BY: N/A	DATE	JOB NUMBER: N/A	DATE	
APPROVED SIGNATURES			DEPT. NO.	DATE
Product Team Leader (P. Patel) <u>P. R. Patel</u>			8341	11/30/98
Systems Engineer (R. Platt) <u>R. H. Platt</u>			8341	11/30/98
Design Assurance (E. Lorenz) <u>E. Lorenz</u>			8331	12/1/98
Quality Assurance (R. Taylor) <u>R. Taylor</u> For			7831	11/30/98
Technical Director/PMO (R. Hauerwaas) <u>R. V. Hauerwaas</u>			4001	12/1/98
Released: Configuration Management (J. Cavanaugh) <u>J. Cavanaugh</u>			8361	12/1/98
By my signature, I certify the above document has been reviewed by me and concurs with the technical requirements related to my area of responsibility.				
(Data Center) FINAL				
Please return this sheet and the reproducible master to Jim Kirk (Bldg. 1/Dept. 8631), ext. 2081.				

